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Modernism, analysis and new music : studies in the music of Stravinsky and Birtwistle.

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**Modernism, Analysis and New Music:
Studies in the Music of Stravinsky and Birtwistle**

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Thesis Submitted for the Degree of PhD

**King's College
University of London**

- 1 -



ABSTRACT

The language and aesthetics of early-twentieth century modernism provide the framework for a detailed theoretical and analytical examination of selected examples of modernist music – specifically that of Stravinsky and Birtwistle.

The thesis is divided into three parts. Part I forms an introduction by way of a general discussion of the usefulness of notions of modernism for the analysis of new music. Traditional concepts of unity and organicism are criticised as being no longer appropriate for contemporary music and in their place is proposed a theoretical stance which acknowledges the primary role played by fragmentation and discontinuity in much twentieth-century art. Ways of 'balancing polarities' rather than synthesising opposites are explored.

Part II begins with a detailed critique of a number of different theoretical approaches to twentieth-century music. In particular, extensions of Schenkerian theory and pitch-class set theory are brought under scrutiny. The possibilities of Lerdahl's notion of 'atonal prolongational structure' are also discussed. There follows a detailed examination of two of Stravinsky's neo-classical works, The Rake's Progress and the Symphony in C, in an attempt to demonstrate how the linear (tonal) and circular (atonal) aspects of the music are held in a meaningful balance without implying the negation of one by the other.

Part III is an examination of the music of Harrison Birtwistle. It begins with a comparison of the ideas of Birtwistle and the artist, Paul Klee, a key figure in the modern movement and a profound influence on Birtwistle's work. Analyses follow of Refrains and Choruses (1957), Punch and Judy (1966), Carmen Arcadiae Mechanicae Perpetuum (1977), Secret Theatre (1984), and Four Songs of Autumn (1988) where, as in Stravinsky, the balancing of opposed or discontinuous elements is found to be central to the music. New analytical strategies are developed which are able to account for the positive constructive role played by such oppositions.

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Brighton, January 1993

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PART I

CHAPTER 1

Introduction: Modernism, Analysis and New Music

The work of Harrison Birtwistle is just one contemporary example among many of a music which is apparently consistent and coherent yet whose method or system is virtually impossible to unravel.

...you need a method of working which enables you to manipulate the material. However, I've only once been able to explain my method and that was when my son Silas asked me what I did with all those numbers and I felt it my duty to tell him. It was some time ago and I've forgotten what I said but I couldn't do it again. I've certainly created a vocabulary for doing things but some items get thrown out, some forgotten... In any case it never seems to help me when composers talk about what they do. All that matters is that the composer has a responsibility to his material. But that's obvious. [1]

Neither is this the case only with the newest of music. A recent theoretical study of the music of Varèse, for instance, begins by pointing out that in such circumstances the theorist really is groping in the dark:

The actual devising of a theory, and from it an analytical method, must remain an exercise based largely on conjecture. The available hard evidence of Varèse's compositional procedures is very skimpy, principally because Varèse did not think that it was anyone else's business how he composed. [2]

Bernard's monograph makes no claim to completeness. There is still no exhaustive study of the music of Varèse, despite his being cited by figures as diverse as Birtwistle, Boulez and Feldman as an important influence on their thinking. The work of many other major figures in

the history of twentieth-century Western music similarly remains superficially treated by music theorists and analysts: Cage, Ives and Messiaen, for example, are all still awaiting substantial analytical discussion. Even the music of Stockhausen, whose following and influence is undeniably large, has remained relatively impervious to any serious large-scale analytical exploration. [3] Furthermore, this lack of consensus about how to write about modern music is not restricted to the work of individualistic composers. Writers cannot even agree on how to deal with the so-called classical atonal repertory of the earlier years of the century, as was illustrated by a recent celebrated exchange between Richard Taruskin and Allen Forte over the tonal/non-tonal nature of Stravinsky's The Rite of Spring. [4]

Why, then, when theorists and analysts can agree, to a large extent, on a body of 'truth' about the tonal practice of the 17th to 19th centuries, do they find it so difficult to agree about the 'meaning' of the music of our own century? The answer to this question might, at first, seem obvious in that it is quite clear what tonal music is, that there is a readily identifiable common practice, but this is not so with twentieth-century music. The only fact theorists, analysts and critics alike can agree on is that there is usually an absence of traditional tonal harmony and key relationships, though arguments still rage as to what the term for this music should be (atonal? non-tonal? post-tonal?... not to mention Schoenberg's pantonality and suspended tonality, Berger's anti-tonality [5] or Berry's irrelevant tonality [6]). Unless it contains vestiges of tonality, which generates its own terminological and methodological crises, modern music is usually all dealt with under the heading 'atonal'. Some attempts have been made to

codify atonal practice. The most widely discussed of these is Allen Forte's The Structure of Atonal Music [7] which sets out a theory capable, he claims, of elucidating the common harmonic language of such disparate figures as Bartók, Berg, Ives, Ruggles, Schoenberg, Stravinsky, Varèse, and others.

But is the development of an all-embracing theory of atonality, along the lines of a theory of tonality, really possible or even desirable? Forte's work tacitly acknowledges that there is such a thing as an atonal canon and that this can be demonstrated in purely technical (i.e. set-theoretic) terms. Undoubtedly, as I shall discuss in more detail later, Bartók, Berg, Ives, etc., are all, in their own way, modernists, but whether this entitles us to look for some procedure, implicit or explicit, which unites and unifies their music is quite another question. It is this quest after unity at all costs which seems to be the crux of the matter – and the stumbling block of much analysis of contemporary music. In his celebrated article, 'How We Got Into Analysis, and How to Get Out', Joseph Kerman traces this essentially 19th-century view that the purpose of analysis (what he calls its 'ruling ideology') is to demonstrate organicism. [8] Whether it is by adapting Schenkerian theory, applying set theory, adopting a motivic approach, or by whatever other means, analysts appear to be more concerned with demonstrating the consistency of their own theories and with perpetuating the 19th-century belief that the only great music is that which is wholly unified, rather than actually asking themselves whether their critical approach is fully appropriate to the music.

This need for an empirical methodology is not aided by the composers themselves. Webern, for instance, expressed the desirability

of unity in composition above all other things:

Unity is surely the indispensable thing if meaning is to exist. Unity, to be very general, is the establishment of the utmost relatedness between all component parts. So, in music, as in all other human utterance, the aim is to make as clear as possible the relationships between the parts of the unity: in short, to show how one thing leads to another. [9]

Schoenberg, too, made it quite clear that the main advantage of his 'method of composing with twelve tones is its unifying effect ... in music there is no form without logic; there is no logic without unity'. [10] Indeed, such sentiments would not appear to be too far removed from Schenker's intentions with regard to tonal music, certainly as outlined in Free Composition, where he sets out to show that 'works that are tonal and exhibit mastery are "projections" in time of a single element: the tonic triad'. [11] Furthermore, the natural model, that of organic growth, is a concept that relates Schenker's and Schoenberg's thinking: for Schenker, the tonic triad is the 'Naturklang', the sound of nature, and the unified masterwork is one which demonstrates organic growth from background to foreground; for Schoenberg (as for Webern also), organicism is one of those elements crucial to the comprehensibility of musical form. [12] And just as Schoenberg was keen to emphasise the traditional aspects of his new music, so he was eager to align himself with his own musical past: 'I have discovered something that will ensure the supremacy of German music for the next hundred years'. [13] Continuity was everything.

The authors of a recent introduction to the theory and practice of musical analysis note that the aim of the composer to demonstrate unity in all things is also, normally, the aim of the analyst. Jonathan

Dunsby and Arnold Whittall raise the question we have already been considering:

Yet the analyst needs to question whether there is a genuine continuity from tonal to atonal composition that justifies the belief that, in all circumstances, unity is 'the indispensable thing'. The point is not that, in genuinely atonal music, unity must be replaced by its opposite, utter chaos, but that 'to show how one thing leads to another' need not be the same as establishing 'the utmost relatedness between all component parts'. [14]

They go on to discuss a framework within which such 'genuinely atonal music' can be understood that does not impose an artificial notion of unity on any musical form but that does not deny its coherence either. It is a shift from a position of synthesis to one of symbiosis (their term) where an equilibrium is established between elements that, nevertheless, remain distinct. [15]

This idea is not new: for instance, the very term symbiosis had been used in a musical context by Stockhausen in 1974 to distinguish his compositional intentions from a synthetic one 'where the components disappear'. [16] In fact, the concept of an artwork in which the component parts are held together in some dynamic and meaningful relationship - allowing both continuity and discontinuity, order and disorder, to coexist - is central to an understanding of modernism. After all, an artwork would be unable to permit the possibility of randomness, whether it be a complete collage of 'objets trouvés' or simply the inclusion of certain indeterminate elements, if it were concerned only with unity, with demonstrating the composer's control over every aspect of the form, with establishing 'the utmost relatedness

between all component parts'.

If it is true, then, that the music of this century is so different from the music of the preceding three centuries, we now need to consider why and how this is so. In what ways does modern music demand a complete rethinking of our critical approach to it?

We have already seen that there is no identifiable common practice to be found in 20th-century music as there was in the music of the 17th to 19th centuries. In his collection of essays on 'Patterns and Predictions in Twentieth-Century Culture', Leonard B. Meyer writes about the pluralism of the modern age (from his perspective in the 1960s) and argues a case for a move away from a belief in progress in the arts, in what he calls a 'causal' or 'teleological' view of history, and towards a position of 'fluctuating stasis'. This he defines as:

... a steady-state in which an indefinite number of styles and idioms, techniques and movements, will coexist in each of the arts. There will be no central, common practice in the arts, no stylistic 'victory'. In music ... tonal and non-tonal styles, aleatoric and serialized techniques, electronic and improvised means will all continue to be employed. [17]

And the same, surely, must be true of the individual modern work of art. If a form is built of many apparently contradictory components, this does not necessarily invalidate it as a legitimate aesthetic statement. It can, nevertheless, be perceived as coherent and the 'relatedness' or connectedness of the parts is not seen to be achieved by subsuming them under some magical, all-encompassing law of unity imposed from outside of the work, but by viewing the form as a 'steady-state' whose constituent elements are contained by the form, and are given meaning by their opposition to one another.

This is what Arnold Whittall sets out to elucidate in a seminal article in which, having prefaced his comments by observing the general acquiescence of writers with Webern's above-quoted emphasis on the need for unity, he examines the structure of Webern's piece for violin and piano, Op. 7, No. 3, within a modernist context. [18] It is the 'urge to fragmentation', he declares, that 'distinguishes 20th-century modernism from all previous manifestations of the radical spirit' and he advocates the development of (analytical?) techniques which bring the diverse elements of a composition 'into the most intimate relationship with each other, whilst at the same time preserving the validity of the contradiction between them'. [19] After pursuing the symbiotic analogy already discussed, he goes on to propose that 'a "modernist" balance of discontinuities, ... functioning more in terms of polarities than of centralities, can function as a positive, constructive aesthetic principle, creating new kinds of coherence rather than a single kind of incoherence'. [20] If, as has already been suggested, the governing orthodoxy (Kerman's 'ruling ideology') is the principle of unity, then this is indeed a radical proposition. More recently, Whittall has extended his argument to advocate that historical context must also be taken into account: as he explains, it is not that the old aesthetic must be denied but the analyst must come to realise 'what aspects of the old music in question are of central theoretical concern'. [21] Thus, anti-organicism does not mean 'that the various elements used in a composition may have absolutely nothing to connect them, but that some kind of contradiction of language occurs which makes analytical demonstrations of interruption or suspension take priority over demonstrations of connection'. [22] Whittall has demonstrated his

thesis in relation to figures as diverse as Berg, Stravinsky, Tippett and Webern. [23]

Even if music theorists have been slow to grasp the true implications of what has happened to music this century (and I shall deal at length later with the possibilities opened up by Whittall's propositions), those composers less concerned with aligning themselves with tradition have been eager to point out the truly radical nature of their enterprises.

When new instruments will allow me to write music as I conceive it, the movement of sound masses, of shifting planes, will be clearly perceived, taking the place of linear counterpoint. When these sound masses collide the phenomena of penetration or repulsion will seem to occur. Certain transmutations taking place on certain planes will seem to be projected on to other planes, moving at different speeds and different angles. [24]

When Varèse uses the language of 'sound masses ... planes ... penetration ... repulsion', this is not the rhetoric of an organicist, of a synthesist, but of a true modernist (despite the apparent contradiction, as in the case of Webern, between his statements of intent and actual compositional practice). The parallels with the writings of other figures of the modern movement are unmistakable:

Constructions of a-rhythmical forms, the clash between concrete and abstract forms. Constructions of veiled shapes with transparent ones, the repeating of different parts of given bodies which break up, intersect and interpenetrate each other...[25]

In these [works] I tried to create new and direct images based on secret rhythms of which I had become conscious; they writhed, got entangled, and exploded against each other ... It was a fragmentary style ... It recorded even the slightest oscillations of my inner mood. [26]

It was obvious that there was something very new about the modern age that artists, musicians, poets and novelists, not to mention psychologists, sociologists and politicians, were attempting to articulate. And although every new generation must think that its ideas are revolutionary, as Herbert Read commented, there is a discernible difference in kind in the modern revolution: '... It is not so much a revolution, which implies a turning-over, even a turning back, but rather a break-up, a devolution, some would say a dissolution. Its character is catastrophic'. [27] This sense of the utterly new, of a need for a radical break with the past, is a common thread in modernist thought, and in certain quarters was expressed in uncompromisingly direct terms:

Do you then, wish to waste all your best powers in this eternal and futile worship of the past, from which you emerge fatally exhausted, shrunken, beaten down? ... But we want no part of it, the past, we the young and strong Futurists! ... Come on! set fire to the library shelves! Turn aside the canals to flood the museums! ... Take up your pickaxes, your axes and hammers and wreck, wreck the venerable cities, pitilessly! [28]

Throughout the Europe of the first two decades of this century, these sentiments were being reiterated, albeit in less violent tones but no less vehemently, by many different artists.

Things fall apart; the centre cannot hold,
Mere anarchy is loosed upon the world ... [29]

I want to be as though new-born, knowing nothing about Europe,
nothing, knowing no pictures, entirely without impulses, almost in
an original state. [30]

In America, too, though the traditions of high art were essentially inherited European ones, a sense of freedom was in the air. For Charles

Ives, the past was merely something to be used in the present: 'Eclecticism is part of [a composer's] duty; sorting potatoes means a better crop next year'. [31] The composer, he claimed, should constantly be searching for new modes of expression, uninhibited by rules or the requirements of a common practice: 'The humblest composer will not find true humility in aiming low - he must never be timid or afraid of breaking away, when necessary, from easy first sounds'. [32] Though both Americans and Europeans were turning their backs on their respective pasts for different reasons (the Americans, Ives especially, through a need to create a distinctly independent American art), their approaches were decidedly similar, similarly 'modern'. Ives's eclecticism is allied, for instance, to the borrowings of Dada, a movement which in itself borrowed ideas from many other modern sources - Cubism, Futurism, Expressionism, and so on. Ives's constant searching for a new language appropriate to a new age (and, in his case, a new sense of national identity) is echoed throughout modernist writings, from Marinetti's belief in the renewal of human sensibility brought about by the discoveries of science ('we will sing of the vibrant nightly fervour of arsenals and shipyards blazing with violent electric moons ...') [33] to Schoenberg's 'new sound symbolising a new personality'. [34] It is also striking how the artists of these years, especially those in Europe, felt it was inevitable that they created what they did - Stravinsky's famous comment that he was 'the vessel through which Le Sacre passed', [35] Schoenberg's statement that 'the method of composing with twelve tones grew out of a necessity'. [36]

Similar attitudes to the past, to received cultural traditions, seemed also to prevail after the Second World War. Certainly, the two

leading figures of the European musical avant-garde turned their backs on what they had inherited – even on the ideas of the earlier years of the century (with the exception of the work of Webern in which they saw the possibilities of a totally new music):

History as it is made by great composers is not a history of conservation but of destruction – even while cherishing what has been destroyed. [37]

... Hence a refusal of repetition, of variation, of development, of contrast. Of all, in fact, that requires 'shapes' – themes, motives, objects ... All this I renounced when I first began to work with 'pointillism'. Our own world – our own language – our own grammar: nothing neo- ...! [38]

As before, these feelings were being paralleled in the USA. Indeed, it was probably only in America that a complete rejection of the old (European) aesthetic was possible. Boulez and Stockhausen, though they reviled Schoenberg for being, as they saw him at the time, worse than a traditionalist, found it impossible to escape a culture which had revered the status and standing of the artwork and the artist since the Renaissance. It was in this context that they turned to Messiaen and developed their own responses to the possibilities serialism offered them. John Cage, on the other hand, was an actual composition pupil of Schoenberg. Like Ives, Partch and Cowell before him, he took what he needed from his own cultural present – and this, of course, included not only the traditions of the West but of the East also, its music, its philosophies and its religions – and rejected the rest. Thus, Cage was able to demand an approach to composition in which even the omniscience and omnipresence of the composer's ego was not a prerequisite. He wrote of:

... a musical composition the continuity of which is free of

individual taste and memory (psychology) and also of the literature and "traditions" of the art. [39]

Whether we label such ideas modern (indeed, modernist – and there is a distinction) or postmodern matters not at this juncture. What is important is the newness of the aesthetic, an aesthetic which can be viewed very much in the modernist 'tradition' (the word is particularly ironic in this context) of the work of Dada and surrealism.

More recently still, Elliott Carter has observed the differences between the European and the American aesthetic. A follower, scholar and indefatigable champion of the music of Ives, Carter has adopted distinctly Ivesian tones in commenting on the 'special freshness' he sees in the good works of American music:

For I came to realise that America itself is being created right here before us, moment by moment, combining its sometimes perplexing unwillingness to consider the past with its good-natured generosity and idealistic hope for the future. To chart a cultural development here ... was a waste of time, while what was and is important is to make the present, with all its connections to the past and anticipations of the future, exist more powerfully than either of these. [40]

Thus, it is apparent that, in both the Old and New Worlds, there is a high degree of consensus among creative artists of this century with regard to the nature of their art. Though the artworks themselves – whether they be musical compositions, paintings, poems, novels, or whatever – may differ enormously in terms of style and content, their aesthetic aims would appear to be similar. There seem to be certain ideas held in common between all of them i.e. it appears to be possible to say that there is something we might call the language of modernism.

Yet, though these works share the same aesthetic context, they do

not necessarily share the same technical vocabulary. Herein lies the crucial difference between tonal and atonal music. Though the music of Bach and Brahms is obviously very different, each has the technical vocabulary of tonality in common; it is the organic process of composing out from background to foreground, as Schenker would have it, that both defines the differences between the work of these two masters and marks their linguistic similarities. The same cannot be said of two very different atonal works. Pierrot lunaire and The Rite of Spring for instance, though both written in the same year (1912) and both very much examples of modernism in music (for reasons I shall define more closely below), cannot, in the same way, be said to employ the same musical language. To say they are both examples of atonality is really only to observe that in these works the composers have turned their backs on the prevailing musical language i.e. that they are not tonal - though even this is not entirely true. To try then to demonstrate that they each share a common (replacement?) language of atonality is both as futile as it is impertinent. To show that a similar contrapuntal structure exists between outer voices in specific works of Bach and Brahms is, arguably, a valid exercise; to show that Pierrot and The Rite operate according to the same principles of pitch-class set manipulation is, it seems to me, to be utterly insensitive to the very different technical achievements of each of these works. And when the music of Skryabin, Ives, Ruggles, Busoni and Szymanowski is added to the unified canon of atonal works ('Any composition that exhibits the structural characteristics that are discussed [in The Structure of Atonal Music], and that exhibits them throughout, may be regarded as atonal'), [41] the ridiculousness of the exercise becomes apparent.

This is where an understanding of the nature of modernism becomes essential. We need to remind ourselves of Meyer's 'fluctuating stasis', of a cultural environment in which many styles and techniques can coexist without being subsumed into each other – a heterogeneous yet stable state. As we have seen, Whittall has already suggested that we need to develop a critical language that can take account of such a situation.

It would be wrong to suggest, however, that all modern artworks do not demonstrate certain technical similarities. Certainly, all the artists living and working in central Europe in the earlier years of this century shared their ideas freely, as has been well documented. Schoenberg, for instance, was an accomplished painter as well as a composer and theorist. Documents first published in 1980 attest to the fruitful cross-fertilization of ideas between him and the painter, Wassily Kandinsky. [42] It is surely not without significance that they first met about 1910 when Schoenberg was writing his first atonal works and Kandinsky was experimenting with abstraction. And, though one should be wary of making too direct a parallel between the new techniques being employed in music and in painting, there is nevertheless a striking correspondence between Schoenberg's rejection of tonality, which had controlled music since the Renaissance, and Kandinsky's move away from representationalism in painting, which had similarly been the ruling convention in Western art since the end of the Middle Ages. When Schoenberg wrote to Kandinsky: 'I am sure that our work has much in common – and indeed in the most important respects', he was, he claimed, referring to formal procedures in both their work and in particular to what he called the 'elimination of the conscious will

in art', that is, unconscious form-making freed from aspirations towards tradition. [43]

Other studies have attempted to pinpoint correspondences between music and the other arts in early-twentieth century Europe. Donald Mitchell has not only discussed the expressionistic outlook of both Schoenberg and Kandinsky but has also highlighted interesting aesthetic parallels between Schoenberg's twelve-note method, Le Corbusier's 'Modulor' and Picasso's development of Cubism. He points to the almost simultaneous abandonment of tonality by Schoenberg at the end of his Second String Quartet and the abandonment of perspective in Picasso's Les Femmes d'Alger in 1907/8 as an example of the 'remarkable alignment of disruptive events in two of the major arts of the century ... There could hardly be a clearer case than this of the "common background" shared by artists'. [44]

Debussy's close associations with the symbolist writers; Varèse's attraction to the company of painters, sculptors and writers (among them, Apollinaire, Barzun, Cocteau, Delaunay, Leger, and Modigliani) in preference to musicians; the 'interdisciplinary' nature of the Futurist movement and its influence on Honegger, Milhaud, Ravel and Varèse (it was supposedly Varèse who introduced the Parisian audience to the 'Russolophone', despite his oft-repeated denial of any association with Futurist ideals [45]); Satie's collaborations with Cocteau and Picasso on Parade and, later, with Duchamp and Picabia on the 'Dadaist' ballet, Relâche: these are just a few illustrations of how composers of the first two decades of this century were directly influenced by the work of their contemporaries in the other arts. And vice versa. Klee was an accomplished professional violinist and had a wide-ranging interest in

music; Kandinsky constantly looked to music as a model for the development of painting; Marinetti's rhetoric in the 'Manifesto of Futurism' is full of song ('... we will sing of the multicoloured, polyphonic tides of revolution in the modern capitals ...'). [46]

This sharing of a common world of ideas and experiences becomes even more apparent when one examines the almost claustrophobic fervour – social, political, intellectual, artistic – that pertained in the European centres of the modern movement. As one writer on the 'cities of modernism' has commented, 'such cities were more than accidental meeting places and crossing points. They were generative environments of the new arts, focal points of intellectual community, indeed of intellectual conflict and tension'. Furthermore, he goes on to suggest that these cities 'were also often novel environments, carrying within themselves the complexity and tension of modern metropolitan life, which so deeply underlies modern consciousness and modern writing'. [47]

'Fin-de-siècle' Vienna is certainly an obvious example of such a city: a melting pot of ideas and ideologies, a city of marked contrasts between the conservative and the progressive, between the reactionaries and the radicals. And surely it was this conflict between the conventional, wealthy, smug provincialism of the old bourgeois Vienna and the presence of the new socialists, philosophers, writers, painters and musicians in the city that gave rise to some of the most fertile ideas of the modern movement. Between about 1890 and 1920 Vienna witnessed the presence of a large number of influential artists and thinkers: the young Viennese ('Das junge Wien') who met at the Cafe Griensteidl (1890-97) and among whom numbered Peter Altenberg, Hermann Bahr, Hugo von Hofmannsthal, Arthur Schnitzler and Stefan Zweig; other

literary figures of the standing of Franz Kafka and Robert Musil; the 'Vienna Secession' group of painters founded by Klimt in 1897 including Kokoschka and Schiele and the architects, Otto Wagner and Adolf Loos; Schoenberg and his 'school'; other important composers such as Mahler and, later, Richard Strauss; the journalist, Karl Kraus and his polemical journal, Die Fackel, which he founded in 1899; the philosopher, Wittgenstein; and, not least, the psychoanalyst, Sigmund Freud. A shared expression of the new, the modern, manifests itself in various ways in the work of all these figures. There is a sense of extreme dissatisfaction with the old order, a sense of isolation and impending catastrophe, a need for new modes of expression to suit a rapidly changing world in which the subconscious played as important a role in determining human affairs as any external 'causality'. The old guard accused the younger generation of being 'decadent ... mad ... pathological' [48]; Kraus, in return, attacked their public moral hypocrisy with regard to sexual matters while Schnitzler, a doctor and neurologist as well as a writer, adapted Freud's psychoanalytical methods to his own literary ends (see, for instance, Schnitzler's 'interior monologue', Leutnant Gustl, of 1901).

So what was this common aesthetic, this shared world of ideas? The parallel abandonment of tonality in music and of perspective in painting – a similar break-up of the essentially linear controlling conventions in the two arts – has already been commented on. There was now in all the arts a move away from the 19th-century idea(l) of the organically-coherent artwork. Fragmentary ideas (musical, visual, literary)

could appear as and when they willed to form a non-directional, anti-teleological art. This is the 'urge to fragmentation' which, as we have seen, characterises so much modern art, the need to let sounds or colours or shapes or words to 'be themselves'. In literature, a narrative was no longer a prerequisite: words were used for their appearance on the page, for their 'sonic' qualities or for their symbolic value. There was no longer necessarily any direct correspondence between a word as sign or signifier and the idea or object in the 'real' world, the signified, to which it related. In painting, artists were exploiting colour and shape for their own sakes, for the feelings they could provoke in the viewer, rather than attempting to represent things as they appeared 'in reality'. And, of course, in music composers were beginning to use sound as colour, as objects moving in space, as independent rhythmic entities, devoid of any tonal function. A plural art now became possible in which ideas could occur simultaneously, be seen from many different angles at the same time or be violently opposed without making any attempt to mediate between them.

This fragmentation inevitably led to a search after a new kind of order. Closed forms opened - ideas were no longer contained by the frame, the cadence or the paragraph. Artworks became highly self-conscious, often self-referential, as composers, painters, writers attempted not only to open up new possibilities for expression but also to place these ideas in a totally new yet meaningful context. The new discoveries of science and, in particular, the new awareness of the working of the unconscious mind as revealed through the emerging discipline of psychoanalysis became sources for this new order. The

logic of the dream came to replace the rationalism of the old conventional systems; the formality of mathematics, architecture and engineering came to replace the convenience of the old conventional forms.

And as modernism gave way to postmodernism the same questioning of the old order became even more clearly articulated – not only were artists challenging the meaning of art but they were also challenging whether art could actually mean anything at all. As David Lodge has put it, 'Post-modernism continues the modernist critique of traditional realism but it tries to go beyond or around or underneath modernism, which for all its formal experiment and complexity held out for the reader the promise of meaning, if not of a meaning' [49]. And he goes on to define postmodernist writing as a discourse which consciously eschews similarity and contiguity in favour of 'Contradiction, Permutation, Discontinuity, Randomness, Excess and The Short Circuit' [50]. Although the work of, for example, Berio, Boulez, Cage, Crumb, Glass and Stockhausen demonstrates all or some of these characteristics and may, by pushing ideas to extremes, appear to have escaped modernism altogether, it can, as has already been seen, still be regarded as having its origins in and continuing the 'traditions' of modernism. Certainly many of these composers have acknowledged in their work their indebtedness to their modernist forefathers, whether it be Cage's Duchamp-inspired use of 'ready mades', Boulez's mobile forms suggested to him by Mallarmé or Berio's Thema: Omaggio a Joyce. And such modernist techniques as the layering of musical material and the superimposition of apparently unrelated ideas have a clear parallel with, say, the collages of Dada and the juxtapositions of surrealism and

can be found to operate in works as diverse as Mahler's symphonies, Ives's Central Park in the Dark, Debussy's Jeux, Cage's Imaginary Landscapes, Berlioz's Sinfonia or Birtwistle's Earth Dances.

The argument still burns as to whether postmodernism is a continuation of or a reaction against modernism. Frederic Jameson, has explored this argument at length:

... when we make some initial inventory of the varied cultural artifacts that might plausibly be characterised as postmodern, the temptation is strong to seek the 'family resemblance' of such heterogeneous styles and products not in themselves but in some common high modernist impulse and aesthetic against which they all, in one way or another, stand in reaction. [51]

In modernism, he argues, there are still to be found certain aspects of the past, of 'nature' or 'being', and culture 'can still do something to that nature and work at transforming that "referent"'; postmodernism, however, is 'what you have when the modernisation process is complete and nature is gone for good'. [52] Thus, for Jameson, while modernism was 'still minimally and tendentially the critique of the commodity and the effort to make it transcend itself', postmodernism 'is the consumption of sheer commodification as a process'. [53]

At the very least, then, the 'absurdity' of the work of Beckett or Cage or Tinguely sponsors a healthy scepticism about the nature of modernism – or, as Bradbury and McFarlane have put it, paraphrasing the ideas of Ihab Hassan, 'the newer developments must at least force us to reconsider Modernism and distinguish the obviously continuous elements in it ... In short, the argument around Post-Modernism now adds to the abundance of the versions of Modernism'. [54] The important point is that the modernist aesthetic is still able to provide a valid framework

within which one is able to engage in a debate about contemporary works of art. Though early works of modernism may appear to have 'betrayed' their nineteenth-century origins with vestiges of continuity, of narrative structures, of representationalism, such features occurred within a new context and it is this which must be the starting-point for any discussion of these works. It is the discontinuity of Stravinsky's neo-classical music, not its apparent closeness to functioning tonal works, that is of primary interest; it is the interplay of the 'facets' of Bracque's paintings, of lines, colours and forms, that is of principal importance, not any object that happens to be represented; the significance of Eliot's The Waste Land lies as much in the way in which he writes as in the elusive subject matter of the poem. [55]

Modernism is a loose label. It has numerous aspects, many of which are quite distinctly opposed to one another. The very activity of attempting to delimit an aesthetic distorts the historical picture and, by definition, exaggerates similarities at the expense of differences. And, in any case, the history of modernism is not yet complete: whether committed out-and-out Moderns, Postmodernists, neo-Romantics, or whatever, we are still living and working within or against the modernist legacy. Nevertheless, though the styles and techniques of modernism may be opposed, it is possible, I believe, to acknowledge a common ground, even if this can only be expressed in terms of tendencies and possibilities rather than actualities. What makes modern art so different from the art that preceded it is its emphasis on its modes of depiction (effect) rather than on what it is depicting (content). Modernism has to be viewed in terms of crisis, the break-up of the old order, of the old aesthetic, and the manifold means by which that crisis

is expressed – whether in terms of abstraction, fragmentation, atonality, plurality or the barely perceptible motivations of the unconscious mind – matters less than the fact that that crisis is being self-consciously articulated. Modern art is not pretending to be about anything other than itself. Therefore it needs to be understood in its own terms, and in order even to begin to be able to discuss it, one has of necessity to adopt the language of modernism itself, the language of opposition, of difference, of crisis.

This leads us back to where we began. If modern music is quite clearly not primarily concerned with unity, continuity, synthesis or organicism, why then do we persist in applying theories to this music which are designed to look for these very attributes (other than to establish the extent to which it is so concerned)? To make the a priori assumption that any modern piece of music is going to demonstrate connectedness or, indeed, that it is going to offer up its unique and unitary meaning into the hands of the analyst at the slightest prompting is, to say the very least, naive. If we are to make intelligent critical sense of this music, we must ask of it appropriate and pertinent questions in the first instance.

One writer has recently attempted to address this question from quite a new perspective – new, at least, as far as the discipline of music analysis is concerned. In an important (albeit, at times, inscrutable) article, Alan Street has drawn on the work of aestheticians, philosophers and literary critics to provide an interdisciplinary context for an uncompromising attack on this 'wholehearted devotion to artistic unity': '... the championship of

unity over diversity represents nothing other than a generalised state of false consciousness: illusion rather than reality.' [56] He traces the origins of this quest for unity and, in particular, organicist thinking (i.e. the equation of culture with nature) back to the aesthetic writings of Kant and their persistence throughout the nineteenth century, and then proceeds to evaluate the ideological stance of both Carl Dahlhaus and Joseph Kerman on the matter of unity and organicism. He quotes Dahlhaus's observation that 'any listener accustomed to artificial music always presupposes the wholeness of a work, even a work quite unknown' [57] and comments that '... It could be that the (unwarranted) a priori, and not organicism per se, is a more discriminating reason for refusing to develop a critical attitude to ambiguity and irresolution'. [58] He goes on to state that 'the empirically-minded analyst would be unlikely to regard such teleological or a priori arguments in favour of unity as anything more than tendentious' and cites, perhaps somewhat surprisingly, pitch-class set theory and Meyer's implication-realisation model as examples of a substitute 'inductive objectivity'. [59]

Two authors in particular, Dunsby and Whittall, are singled out by Street for detailed discussion as examples of theorists who have attempted to challenge this tradition. In the case of Whittall, it is his ideas, as already outlined, of 'balancing discontinuities' and 'symbiosis' as well as the need for an historically contextualised theory that are hailed as being of special value. But, for Street, this is not, in itself, enough. Indeed, he goes as far as to accuse Whittall of being guilty of the same kind of formalism he finds in the organicist theorists he so despises. [60] And, interestingly, it is Whittall's

very notion of symbiosis that comes in for some of the strongest criticism: rather than pursuing his ideas in terms of 'abstract oppositions', Whittall has selected a natural metaphor, an 'organic dependency'. Street draws the following conclusion from Whittall's propositions and their application:

... while Whittall may begin with the intention of liberating the notion of contemporaneity from its conventionalist shackles, it seems that he cannot help but succumb to the imprisonment of organic temporality for the sake of an unreflecting Symbolist ideal. [61]

While the attitude Street is adopting here may be epistemologically 'pure' in itself, what does he have to replace the theories he has dismantled? How do we circumvent the problems he has isolated and develop a discourse in tune with the modern music under scrutiny? The solution he offers is to posit the ideas of Paul de Man in order to dislocate organicist metaphors and to replace these with an attempt to read allegorically. Allegory, as Street understands it:

... works to problematise the material resistance within the artwork as a means of emphasising the disparity between the latter's manifest ambiguity and the self-reflexive, containing drive of a traditional, formalist conception. [62]

What this means in practice is that the analyst is 'drawn into labyrinths of structural "undecidability"' where 'analytical observation should abandon all belief in interpretative fixity'. [63]

In the light of what we have seen as being characteristic of modernism generally and modernism in music in particular (opposition, fragmentation, discontinuity, plurality, etc.), the approach Street is advocating would appear to be eminently sensible - that is, it seems to

be both empirical and, in the sense that allegorical understanding is, by its very nature, provisional, also pragmatic (quite the opposite, in fact, of 'dogmatic allegories'). An allegorical reading of a modern musical work would permit the existence of contradictions, both in the music itself and in its interpretation, without attempting to subsume them into some synthetic and inappropriate whole.

Thus far, all bodes well. But one must be careful. An allegorical reading, like an 'organic' interpretation, imposes its own ideology. To assume nothing about a work is, in many respects, as 'loaded' as presupposing it to be organically unified - it is just a different set of (more specific?) a priori assumptions. It must be remembered that analysis does and must take place within a certain historical, aesthetic and ideological context. This is where the distinction that Street invokes between nature and culture is crucial. Natural phenomena do not, in themselves, mean anything; they only become meaningful when they are interpreted culturally. A tree cannot, in itself, mean anything other than itself i.e. its own 'tree-ness'; the sounds of waves breaking cannot, in themselves, be considered musical unless and until we place them in a 'musical' context. Works of art, on the other hand, are brought into being by a human mind; they are conscious - indeed, self-conscious - statements which are, from the outset, intended to mean something, even if that meaning is 'no meaning at all' or ambiguous or multiple or a set of open-ended possibilities. And, as we have seen, this is even more true of certain modern works of art whose self-consciousness is very much a facet of their identity. Artworks are not neutral objects: they are products (in the West, at least) of a specific mind, time, place and culture. Similarly our

readings of them can never be neutral: any interpretative decisions we make are inevitably contained and determined by our own time, place and culture. As far as such things are ever possible, these contexts should be acknowledged.

These arguments are, of course, not new. Marx wrote at length about the ideological nature of art [64] and a whole tradition of art criticism has developed devoted to examining art as ideology. [65] One of these writers, Janet Wolff, outlines this principal ideological focus of the Marxist sociological tradition and then goes on to point out that a 'secondary concern has been to expose the ideological nature of art criticism and literary criticism'. She adds that even works of criticism which see art or its history as independent of historical or social determinants 'are themselves shown to be partial and historically specific, and thus, in a particular sense, ideological'. She goes on:

Works of art, on the contrary, are not closed, self-contained and transcendent entities, but are the product of specific historical practices on the part of identifiable social groups in given conditions, and therefore bear the imprint of the ideas, values and conditions of existence of those groups, and their representatives in particular artists. [66]

Hence my concern to examine the conditions which brought about the rise of modernism and, in particular, the community of social, political, intellectual and artistic ideas which inevitably framed the work of all artists working - and, indeed, continuing to work - in the modernist tradition.

We need then to be able to identify our own ideological stance and to be able to distinguish between the nature of different kinds of a priori assumptions. As we have seen, to assume that a work is

organically unified and to bring analytical techniques to bear on it to demonstrate that fact, is one thing; to recognise that a work is coherent and to attempt, empirically, to demonstrate that coherence (i.e. its 'intelligibility') is quite a different matter. Of course, how to recognise that coherence is a difficult question to answer and is again coloured by cultural context, but it is surely fair to say that one of the purposes of analysis is to try to help to articulate both what one instinctively or subliminally understands to be in or signified by a piece of music but cannot immediately or consciously quantify, and the nature of the context within which that understanding takes place. Thus, assumptions are made about a work's coherence as a prelude to analysis but those assumptions have themselves already been developed as a result of a direct experience of that work. [67]

To this extent, Street's adoption and adaptation of a rhetorical device is not, necessarily, any more or less helpful than Whittall's use of a natural metaphor - he is just, perhaps, being a little more careful about identifying his own a priori assumptions, about the ideological implications of the kind of language he chooses to use. [68]

Ultimately, of course, he is imprisoned, as are all writers, by that language. But, at the very least, he does show that:

... theory will not dwindle under the command of allegory. Rather it 'cannot help but flourish', and the more it is resisted, 'the more it flourishes', since, like allegory, 'the language it speaks is the language of self-resistance'. [69]

However, the final outcome of Street's work to date is, inevitably, rather negative. In keeping with the sceptical tradition of the deconstructionists with whom he allies himself, he is quick to criticise the substantial achievement of a writer like Whittall and,

though he does seem to suggest the possibility of an alternative framework within which modern music can be viewed, he gets nowhere near defining a useful methodology by which these ideas can be put into analytical practice. This might at first appear a rather naive plea on behalf of utilitarianism but if a theory is to be of any direct value then it must be seen to have practical analytical applications, something which I do not readily detect in Street's hypothesis. But then the purpose of his enterprise is to deconstruct the language of music theory, not to focus attention on the object of that theory i.e. the structure of the music itself. As has been seen in other attempts to apply analytical models from linguistics and literary criticism to musical structure (from Cooper and Meyer's 'prosody' of rhythm to semiotics and even, perhaps, Lerdahl and Jackendoff's Chomskian 'generative grammars'), the enterprise is fraught with difficulties. It is relatively straight-forward to talk about words in terms of words; it is much more difficult to discuss music (and other non-verbal arts) using words. This entails treating music as a text and so immediately denies music its primary, i.e. musical, existence. Whether one attempts to understand a given musical work in an allegorical, an organic, or any other context, one must be conscious of the fact that one is imposing an ideology on that interpretation.

So we must now return to Whittall's propositions to see if there are other ways of developing the analytical possibilities he suggests.

The central problem for Whittall is the nature of atonality itself and how it is to be interpreted:

The main difficulty which stands in the way of developing a workable Theory of Atonality ... is precisely that of

demonstrating a convincing positive principle which atonal pieces have in common... To interpret, and therefore to analyse, is not just to describe but to categorize, and it may be ... that an atonal composition can be usefully analysed through the demonstration of contrasting categories - through polarities rather than centralities. [70]

The term atonality still has currency, though, as we saw earlier, it is a blanket term which covers a diverse range of music which may have very little in common other than an absence of traditional tonality. To demonstrate 'a convincing positive principle which atonal pieces have in common' would appear to be not only inappropriate but also impossible. However, I have already suggested that such atonal compositions do have something in common - i.e. a shared aesthetic context - which can provide a suitable framework within which to develop a new kind of criticism. This helps us to acknowledge that the aims of atonal composers are often similar but it should not suggest that they are employing similar compositional methods or that there is, necessarily, any deep-level practice that unites the surface diversity of the works. It seems to me that, to paraphrase Whittall, to build a discourse which acknowledges the relatedness of the diverse elements of a modern composition without denying the validity of the contradiction between those elements is a very different activity from attempting to identify a single principle in that work which unites it with all other atonal compositions. This does not in any way deny the possibility that certain atonal works may well share a convincing positive constructive principle, whether this be the balancing of polarities, the role of symmetrical factors, or any number of other technical features, but it should not be assumed that all atonal works of necessity demonstrate

these characteristics (pace Forte - see note 41). I return to a call for the need for empiricism within the general context of the modernist debate.

We have admitted, then, that it is possible to discuss modern music in terms of absolute oppositions and that we should not expect such oppositions to be subsumed into some background unifying scheme. We have also seen Whittall propose that it is possible to acknowledge the relatedness of the constituent elements of a musical composition without denying the contradiction between those elements. Also we understand that it is possible for a work of modern art to be intelligible, to be coherent, without necessarily being organically integrated. How do we then go about incorporating these general principles into a method of analytical investigation? The identification of oppositions in a work is not, in itself, necessarily problematic; opposition is not unique to twentieth-century art. The oppositions of the 'coro spezzato' style of Gabrieli, of the concerto style of J S Bach, of tonic and dominant in the classical style, of key, tempo, rhythm, dynamic and texture in Beethoven, of diatonicism and chromaticism in Wagner, are clearly crucial but are ultimately to be understood within a broader tonal context: at some deeper level, the oppositions, the 'structural dissonances' are seen to be resolved. This is not the case with modern music. Opposition, contradiction, fragmentation are its raison d'être. This might at first suggest a kind of two-dimensional music which has retained the surface oppositions but has discarded an all-embracing functional tonality which provides those oppositions with meaning in favour of an artificially imposed scheme or form (the same accusation has been levelled at certain examples of

'classical' nineteenth-century music [71]). These oppositions are, in fact, usually controlled or contained, but in a very different way. The difference between tonal and non-tonal oppositions is something akin to the difference between centripetal and centrifugal forces [72]: the one is synthetic, bringing opposing elements towards a centre, the other is antithetical, holding in some kind of balance or tension forces whose tendency is to move as far as possible away from one another and from the centre (the 'urge to fragmentation'). What is important to consider is the nature of that containment, the 'modernist' balance of discontinuities', as Whittall puts it. [73]

Stockhausen has talked about this containment in his own music:
Never is the same thing heard twice. Yet one has the clear feeling that an immutable and extremely homogeneous continuity is never abandoned. There is a hidden power of cohesion, a relatedness among the proportions: a structure. Not similar shapes in a changing light. Rather this: different shapes in a constant, all-permeating light. [74]

Indeed, in relation to Momente, though he still slips into the 'language of unity', Stockhausen admits to a notion of 'the present' as a means of containing the many ideas in the work:

This is no self-contained work with unequivocally fixed beginning, formal structure and ending, but a polyvalent composition containing independent units. Unity and continuity are less the outcome of obvious similarities than of an immanent concentration on the present, as uninterrupted as possible. [75]

The problem for the analyst still remains, however, as to how these rules of containment [76], this balance or tension, this 'present' or 'all-permeating light', are to be defined. Perhaps we can only go as far as saying that, in the light of what we have discovered about the

nature of modern art, it is likely that the disparate and opposed elements in any given composition, if it is a coherent utterance, are ordered or controlled in some way but any investigation of that ordering must proceed empirically. This means that methods of investigation might well be different for every piece – or at least different for every composer or 'style'. To proceed otherwise would be to deny the plurality which we have seen Meyer identifying as one of the characterising features of twentieth-century culture. All that remains in common from one work or composer or style to the next is only that general aesthetic notion of the containment of opposed elements. This is an entirely different state of affairs from assuming the a priori existence of an organic unity which binds together all aspects of a work, however seemingly opposed they may be on the surface, by a common technical procedure e.g. by the operation of functional tonality. It simply says that the oppositions of a modern work of art take place within a context which gives those oppositions meaning but never negates the strength of those oppositions.

On one level, this containment may be defined in terms of what might loosely be termed 'style'. Take the work of the Surrealists as just one convenient example. The First Manifesto of Surrealism of 1924 defined Surrealism as 'pure psychic automatism' and went on to define its philosophy as:

... based on the belief in the superior reality of certain forms of association heretofore neglected, in the omnipotence of the dream, and in the disinterested play of thought. [77]

Such a directive might at first appear a recipe for anarchy: anything goes; let your subconscious have free reign. Yet, as we have already

seen, it is impossible for any artist to be totally 'free': artistic work and ideas are determined by and themselves determine the social and historical context in which artists work. This is, in itself, 'containing'. The end product of Surrealism was far from anarchic. Not only is it possible to identify, in a reasonably straight-forward manner, what defines and contains the style of Surrealism, but also within it, the style of each individual artist is quite clearly circumscribed. Without in any way restricting their imaginative possibilities, the visual styles of de Chirico, Dali, Magritte and Miro, for example, are all readily identifiable. The paintings of, say, Dali allow the juxtaposition and spatial coexistence of any conceivable 'object', from the recognisable face of the painter in a familiar landscape to the melting face of a clock, from distorted trees to dismembered limbs - 'pure psychic automatism' or, as Dali himself defined his work, 'paranoiac critical activity'. [78] Yet these objects are contained by the 'logic' of Dali's style: there is a consistency to the paintings' composition, to the way in which these objects are placed on the canvas and the way in which they interrelate. Many objects recur from work to work - human figures, rock formations, and so on. Dali's use of line, shape and, in particular, light, colour and shadow, are unique and consistent. These are his 'rules of containment'. The consistency of Dali's style does not, in any way, synthesise the elements in his pictures, does not weaken the power of the juxtapositions of objects presented from his dreams; rather, it provides a clear context in which those oppositions are allowed to operate. Such a framework gives the contradictions meaning, allowing for the interplay of ideas, without fixing that meaning or restricting the mysterious

nature of the work.

The same is true of more recent developments. As the modern movement migrated from Europe after the Second World War to New York, Jackson Pollock, for instance, abandoned any recognisable images or realistic representationalism in his paintings and between 1947 and 1953 produced a series of so-called 'drip paintings' following in the footsteps of Surrealist automatism. Though, in theory, his paint could fall anywhere, he controls chance: Pollock's canvases are immediately recognisable. The details of the paintings may be 'indeterminate' but the total effect is clear. His composition, use of colour, line and even the texture of the paint give his work a strength and energy. The apparently random opposition of colours and patterns are held in dynamic and meaningful tension. No longer did the colours or shapes of a painting matter per se: it was the context, the way in which they were organised that was important. One of Pollock's contemporaries, Robert Motherwell, wrote of the intentions of the American Abstract Expressionists:

The process of painting then is conceived of as an adventure, without preconceived ideas, on the part of persons of intelligence, sensibility and passion. Fidelity to what occurs between oneself and the canvas, no matter how unexpected, becomes central ... The major decisions in the process of painting are on the grounds of truth, not taste. [my emphasis] [79]

The same was true of music – indeed, Motherwell's statement regarding artistic fidelity is not so very far removed from the remarks of Birtwistle on the responsibility of composers to their material which began this chapter. Birtwistle commented in the 1960s that his music could be re-written using different pitches without changing the

substance of the works. [80] Even Cage's attempts to let sounds be themselves were destined to bear his thumbprint, to leave traces of his organising mind.

What efforts, then, have been made to demonstrate analytically such containing contexts for modern music? In his article on Op. 7, No. 3, Whittall shows how the various oppositions set up by Webern (the polarities of texture, register and rhythm) are contained by a series of pitch class repetitions which gradually unfold the twelve notes of the chromatic scale. [81] The final hexachord of the piece reveals the twelfth pitch class and performs a role of closure by virtue both of completion (of the twelve-note sequence) and complementation (of texture and motive). Nevertheless, there is also a discussion of the nature of the piece's thematic unity – what Whittall describes as 'the recurrent "composings out" of the initial semitone' [82] – which, he argues, demonstrates a modern (as opposed to a modernist) tendency in Webern: 'the traditional concern with unity as an overriding structural and aesthetic principal remains intact'.

Such procedures are demonstrably true for Op. 7, No. 3 but are not necessarily generally applicable to Webern's pre-serial works, let alone other examples of atonality (although the principal of polarity may remain constant, it is expressed through diverse procedures). In the case of Schoenberg's atonal works, Dunsby and Whittall have suggested a symmetrical framework which contains the oppositions of certain pieces. The detailed example they discuss is the Op. 19, No. 6 piano piece where conflicting realms of register, gesture and duration are held in opposition within a scheme of pitch symmetries. [83]

Schoenberg's twelve-note compositions could be viewed in a similar

way. The method provides comprehensibility, i.e. a logic, by means of a set of rules of transformation of a basic interval row ensuring coherence without unifying a work at all levels of structure in the way that tonality does (pace Schoenberg - see note 10). Contradictions still hold true. The motivic workings of Schoenberg's music may be as rigorous as those of Brahms and so are comprehensible [84] but oppositions or contradictions cannot be resolved like dissonances in the absence of tonality.

In his work on the music of Varèse, Jonathan Bernard claims his purpose is 'to express the nature of that constant quality [of Varèse's music] in as precise terms as possible' [85] and he does this by attempting to identify the norms of Varèse's style i.e the transformational rules which control the spatial framework within which Varèse's sound masses operate. He advocates an empirical approach: 'To deal successfully with Varèse's music, the theorist must, first, accept the norms of Varèse's sound-universe as the only factors relevant to the definition of structure in his work'. [86] This is an admirable idea in itself but it becomes, for Bernard, an overriding theoretical obsession when his self-imposed methodology only permits him to look for trichords in the music and to ignore other of its important aspects. [87]

In his monograph on Birtwistle, Michael Hall summarised the composer's central 'organising principle' in terms of an absolute opposition or paradox:

... start with an absolutely regular and uniform pattern of the simplest, most predictable kind then superimpose upon it a pattern which is its extreme opposite - something capricious and unpredictable ... [i.e.] base everything on a combination of chance and necessity. [88]

Though Hall then goes on to justify this statement in organicist terms ('... it is nothing else than the combination which governs the growth, development and evolution of all living things'), it nevertheless proves to be a useful working hypothesis by which to test the various compositional procedures he discovers in Birtwistle's music. This is at its clearest in his analysis of the Verses for clarinet and piano of 1965 where he sets out to discuss the contrasts and conflicts in the work within the containing context of a 'dramatic' impulse. Although he still evinces a desire to show similarity and connection disproportionate to their importance, Hall allows the unexplainable happily to co-exist with the logical: 'Birtwistle's purpose is to enrich the line and the texture with elements that are not open to ready explanation, but have an air of mystery about them'. [89] The possibilities of this 'organising principle' may not always be fully worked out analytically, but I think it still holds true as a good example of the discovery of a 'convincing positive principle' in a modern music which gives analysis of it a context without attempting to resolve all its oppositions, polarities or contradictions.

This, then, is the hypothesis which will be explored in the theoretical discussion and in the analyses which follow. The aesthetics of modernism, it would seem, provide an appropriate context within which the apparent paradoxes and possible meanings of twentieth-century music can be investigated. I am looking (in the light of Whittall's proposals) to build a discourse which, where pertinent, acknowledges the relatedness of the diverse elements of a work without denying the validity, or even the structural necessity, of the contradictions between them.

NOTES

- 1 Harrison Birtwistle in conversation, December 1983, quoted in Michael Hall, Harrison Birtwistle (London: Robson, 1984), p. 149
- 2 Jonathan Bernard, The Music of Edgard Varèse (New Haven: Yale University Press, 1987), p. xviii
- 3 With the notable exception of Jonathan Harvey's The Music of Stockhausen (London: 1975) – a preliminary analytical survey only and desperately in need of updating. Richard Toop has undertaken analyses of specific works – see, for example, 'Messiaen/Goeyvaerts, Fano/Stockhausen, Boulez', PNM, Vol. 13, No. 1, 1974, pp. 141–69, and 'Stockhausen's "Klavierstück VIII"', Contact, No. 28, 1984, pp. 4–19. David Nicholls's American Experimental Music 1890–1940 (Cambridge: CUP, 1990) contains some valuable analyses of Cage's music. David Harold Cox's thesis, 'The Music of Edgard Varèse' (Ph.D. diss., University of Birmingham, 1977), does attempt a thorough account of Varèse's output, but from a very different perspective from Bernard.
- 4 See Music Analysis, Vol. 5, No. 2/3, 1986, pp. 313–37. Their argument centres, appropriately, around a passage from the 'Ritual of the Rival Tribes' which Taruskin views as an example of extended tonality and Forte regards as falling 'well within the sphere of atonal practice'.
- 5 For a fuller list see Arthur Berger, 'Problems of Pitch Organisation in Stravinsky' in Benjamin Boretz and Edward T.. Cone, eds., Perspectives on Schoenberg and Stravinsky (New York: Norton, rev. 1972), p. 123
- 6 Just one of a 'conjectural set of classifications of levels of significance of tonal functions' in Wallace Berry, Structural Functions in Music (Englewood Cliffs: Prentice Hall, 1976), p. 172
- 7 New Haven: Yale University Press, 1973
- 8 Critical Inquiry, Vol. 7, Winter 1980, pp. 311–31. A more recent airing of the issues surrounding organicism in music can be found in David Montgomery, 'The Myth of Organicism: From Bad Science to Great Art', Musical Quarterly, Vol. 76, No. 1, 1992, pp. 17–66
- 9 Anton Webern, The Path to the New Music, ed. Willi Reich, tr. Leo

- Black (London: Universal Edition, 1975), p. 42
- 10 Arnold Schoenberg, 'Composition with Twelve Tones' in Style and Idea, ed. Leonard Stein, tr. Leo Black (London: Faber & Faber, rev. 1984), p. 244
 - 11 See Ian Bent, Analysis, New Grove Handbooks (London: Macmillan, 1987), p. 81. The key element here is that this unity is only demonstrable in what Schenker defines as 'tonal masterworks'; such unity is not manifest in musical forms from outside that period between Bach and Brahms, in the work of 'lesser' composers and in music drama.
 - 12 'Used in the aesthetic sense, form means that a piece is organised; i.e. that it consists of elements functioning like those of a living organism ... The chief requirements for the creation of a comprehensible form are logic and coherence'. Arnold Schoenberg, 'The Concept of Form' in Fundamentals of Musical Composition (London: Faber & Faber, rev. 1970), pp. 1-2
 - 13 Schoenberg to Josef Rufer, July 1921. Schoenberg, however, managed to 'contradict' himself elsewhere, where he was quite plain about the newness of what he was doing. For example in relation to Das Buch der hängenden Gärten of 1910 he commented: '... I may confess to having broken off the bonds of a bygone aesthetic ...'. Quoted in Dika Newlin, Bruckner, Mahler, Schoenberg (New York: Norton, rev. 1978), pp. 235-6
 - 14 Jonathan Dunsby and Arnold Whittall, Music Analysis in Theory and Practice (London: Faber Music, 1988), p. 173
 - 15 Ibid.
 - 16 Quoted in Jonathan Cott, ed., Stockhausen: Conversations with the Composer (London: 1974), p. 191
 - 17 Leonard B. Meyer, Music, the Arts, and Ideas (Chicago: University of Chicago Press, 1967), p. 172. I take stasis here to imply something stable yet dynamic rather than something which has ceased to develop or renew itself. The notion of a cultural stasis, if taken literally to mean stagnation, is unsatisfactory.
 - 18 Arnold Whittall, 'Webern and Atonality: the Path from the Old Aesthetic', Musical Times, Vol. 124, Dec 1983, p. 734
 - 19 Whittall takes this statement from James McFarlane, 'The Mind of

- Modernism' in Malcolm Bradbury and James McFarlane, eds., Modernism 1890-1930 (Harmondsworth: Penguin, 1976), p. 88
- 20 Whittall, op. cit., p. 735
- 21 Arnold Whittall, 'The Theorist's Sense of History: Concepts of Contemporaneity in Composition and Analysis', Journal of the Royal Musical Association, Vol. 112, 1987, p. 4
- 22 Ibid., p. 9
- 23 See, for instance, 'Music Analysis as Human Science? Le Sacre du Printemps in Theory and Practice', Music Analysis, Vol. 1, No. 1, 1982, pp. 33-53 and 'Tippett and the Modernist Mainstream' in Geraint Lewis, ed., Michael Tippett. A Celebration (Tunbridge Wells: Baton, 1985), pp. 109-15
- 24 Edgard Varèse, 'The Liberation of Sound' in Elliott Schwarz and Barney Childs, eds., Contemporary Composers on Contemporary Music (New York: Holt, Rinehart and Winston, 1967), p. 197
- 25 Carlo Carrà, 'Plastic Planes as Spherical Expansions in Space', 1913, reproduced in Umbro Apollonio, Futurist Manifestos (London: Thames & Hudson, 1973), p. 91
- 26 From the novel Die Andere Seite [The Other Side], 1908-9, by Alfred Kubin, quoted in Werner Haftmann, The Mind and Work of Paul Klee, (London: Faber & Faber, 1967), p. 47
- 27 Herbert Read, Art Now (London: Faber & Faber, rev. 1960), p. 44
- 28 F. T. Marinetti, 'The Founding and Manifesto of Futurism', 1909, reproduced in Apollonio, op. cit., p. 23
- 29 W. B. Yeats, The Second Coming
- 30 Paul Klee, diary entry, 1902, quoted in Haftmann, op. cit., p. 53
- 31 Charles Ives, 'Essays Before a Sonata', in Three Classics in the Aesthetics of Music (New York: Dover, 1962), p. 164
- 32 Ibid., p. 179
- 33 'The Founding and Manifesto of Futurism', Apollonio, op. cit., p. 22
- 34 Schoenberg, Theory of Harmony, tr. R.E. Carter (London: Faber & Faber, 1978), p. 400
- 35 Stravinsky, Expositions and Developments (London: Faber & Faber, 1962), p. 148
- 36 Schoenberg, 'Composition with Twelve Tones' in Style and Idea,

- p. 216
- 37 Pierre Boulez in Conversations with Celestin Delègue (London: Eulenberg, 1976), p. 21
- 38 Karlheinz Stockhausen, 'Concerning My Music', for a broadcast of Kontra-Punkte, 1956, reproduced in Karl Wörner, Stockhausen: Life and Work (Berkeley: University of California Press, tr. and rev., 1973), p. 30
- 39 John Cage, Silence (London: Marion Boyars, 1978), p. 59
- 40 Elliott Carter in Allen Edwards, Flawed Words and Stubborn Sounds: A Conversation with Elliott Carter (New York: Norton, 1971), p. 31
- 41 Allen Forte, op. cit., p. ix
- 42 Jelena Hahl-Koch, Arnold Schoenberg - Wassily Kandinsky: Letters, Pictures and Documents, tr. John C. Crawford (London: Faber & Faber, 1984). First published in Salzburg in 1980.
- 43 Ibid., p. 23
- 44 Donald Mitchell, The Language of Modern Music (London: Faber & Faber, 3rd ed. 1976), p. 77
- 45 In June 1917, in the pages of Picabia's Dadaist periodical, 391, Varèse asked: 'Why, Italian futurists, have you slavishly reproduced only what is commonplace and boring in the bustle of our daily lives?', tr. Louise Varèse and reproduced as the epigraph to 'The Liberation of Sound'
- 46 Apollonio, op. cit., p. 22
- 47 Malcolm Bradbury, 'The Cities of Modernism' in Bradbury and McFarlane, op., cit., p. 96
- 48 See Franz Kuna, 'Vienna and Prague 1890-1928' in Bradbury and McFarlane, op. cit., p. 121. For a more detailed discussion, see Allan Janik & Stephen Toulmin, Wittgenstein's Vienna (New York: Touchstone, 1973)
- 49 David Lodge, 'Modernism, Antimodernism and Postmodernism' in Working with Structuralism (London: Routledge & Kegan Paul, 1981), p. 12
- 50 Ibid., p. 13
- 51 Postmodernism, or, The Cultural Logic of Late Capitalism (London: Verso, 1991), p. 55
- 52 Ibid., p. ix



- 53 **ibid.**, p. x
- 54 Bradbury and McFarlane, 'The Name and Nature of Modernism' in Modernism, p. 35. The ideas of Ihab Hassan come from his essay 'POSTmodernISM' in New Literary History, Vol. 3, No. 1, 1971, pp. 5-30
- 55 Eliot himself commented on his own work in this way in his 'Notes to the Waste Land': Tiresias, the blind seer, 'although a mere spectator and not indeed a "character", is yet the most important personage in the poem, uniting all the rest ... What Tiresias sees, in fact, is the substance of the poem'. Collected Poems, 1909-1962 (London: Faber & Faber, 1974), p. 82
- 56 'Superior Myths, Dogmatic Allegories: the Resistance to Musical Unity', Music Analysis, Vol. 8, No. 1/2, 1989, p. 80
- 57 Carl Dahlhaus, Esthetics of Music, tr. William Austin (Cambridge: CUP, 1982), p. 77
- 58 Street, *op. cit.*, p. 87
- 59 **ibid.**
- 60 See, in particular, *ibid.*, pp. 113-18. 'The essence of formalism', by Street's definition, 'can be seen as the symbolic wish to identify the wholeness and integrity of the interpretative image with that of the work itself' (p. 102)
- 61 **ibid.**, p. 117
- 62 **ibid.**, p. 103
- 63 **ibid.**, pp. 103-4
- 64 For an introduction to Marx's ideas see the English language collection, Karl Marx and Friedrich Engels, On Literature and Art (New York: International General, 1973)
- 65 For instance, John Berger, Ways of Seeing (Harmondsworth: Penguin, 1972); Terry Eagleton, Criticism and Ideology: a Study in Marxist Literary Theory (London: New Left Books, 1976); and Raymond Williams, Marxism and Literature (Oxford: OUP, 1977)
- 66 Janet Wolff, The Social Production of Art (London: Macmillan, 1981), p. 49
- 67 Hans Keller often spoke of analysis in this way: '... the only music that exists is music that is part of your profound musical experience. You can only analyse music that exists, hence you can

- only analyse music that is part of your profound musical experience'. Quoted in Jonathan Cross, 'Colloquium: Can Analysis Be Taught?', Music Analysis, Vol. 4, No. 1/2, 1985, p. 193
- 68 Nicolas Ruwet, of course, proposed a similar idea, though in a different context, by stressing the necessity for adopting 'explicit discovery procedures' as a part of the analytical enterprise, i.e. starting from a 'neutral' base and being clear about the implications of the methods one chooses to adopt. See 'Methods of Analysis in Musicology', tr. Mark Everist, Music Analysis, Vol. 6, No. 1/2, 1987, pp. 3-36 (first published in Revue belge de musicologie in 1966)
- 69 Street, op. cit., p. 121. Street's quotations are taken from Paul de Man, 'The Resistance to Theory' in B. Johnson, ed., The Pedagogical Imperative, Yale French Studies, Vol. 63, 1982, p. 20
- 70 Whittall, 'Webern and Atonality', p. 735
- 71 Take, for instance, Charles Rosen's discussion of the schematic (as opposed to the eighteenth-century integrative) nature of the use of sonata form in the nineteenth century in Sonata Forms (New York: Norton, 1980), particularly the final chapter, 'Sonata Form after Beethoven'. His thesis is based on an historical premise: When sonata form did not yet exist, it had a history – the history of eighteenth-century musical style. Once it had been called into existence by early nineteenth-century theory, history was no longer possible for it; it was defined, fixed and unalterable. (p. 292)
- 72 Though my use of an analogy here from the natural sciences should be interpreted neither as a direct attempt to equate culture with nature nor as an indication of organicist tendencies. Music – certainly not modern, post-Einsteinian music – can never be expected to obey the laws of Newtonian physics! However, such 'scientific' language was inevitably employed by the likes of the Futurists:
- It is clear that in one and the same picture or work of art there may be more than one centrifugal and centripetal nucleus in simultaneous and dynamic competition. (Gino Severini 'The Plastic Analogies of Dynamism – Futurist

- Manifestos' in Apollonio, op. cit., p. 124)
- 73 Whittall, op. cit., p. 735
- 74 Stockhausen, 'Concerning My Music', quoted in Karl Wörner, Stockhausen: Life and Work, p. 30
- 75 Stockhausen on Momente in Wörner, op. cit., p. 47
- 76 An Idea borrowed from Foucault's The Order of Things via Alan Sheridan's Michel Foucault. The Will to Truth via Whittall - see 'Music Analysis as Human Science?', p. 34
- 77 Quoted in Dawn Ades, 'Dada and Surrealism' in David Britt, ed., Modern Art. Impressionism to Post-Modernism (London: Guild Publishing, 1989), p. 226
- 78 Ibid., p. 244
- 79 Quoted in Anthony Everitt, 'Abstract Expressionism' in Britt, ed., op. cit., p. 266
- 80 See Michael Nyman, 'Two New Works by Birtwistle', Tempo, No. 88, 1969, pp. 47-50
- 81 All subsequent references are to Whittall, 'Webern and Atonality', pp. 733-7
- 82 Is this what Street sees in Whittall as 'the imprisonment of organic temporality for the sake of an unreflecting Symbolist Ideal'?
- 83 Music Analysis in Theory and Practice, pp. 126-30
- 84 Schoenberg: 'The basic set functions in the manner of a motive' in 'Composition with Twelve Tones', p. 219
- 85 Jonathan Bernard, op. cit., p. xiv
- 86 Ibid., p. 40
- 87 For a more detailed critique of Bernard's work see my review of his book in The Music Review, Vol. 49, No. 4, 1988, pp. 313-6
- 88 Michael Hall, op. cit., p. 13
- 89 Ibid., p. 45

B

A

PART II

CHAPTER 2

Preliminary Theoretical Explorations

In a recent and important article introducing his notion of atonal prolongational structure, Fred Lerdahl begins by addressing some of the points raised in Chapter 1 within the context of music theory and in relation to the early atonal works of the Second Viennese composers. What troubles him as theorist, what he describes as 'the theorist's nightmare' no less, is what we have seen as characteristic of much modern music, from Debussy to Birtwistle, namely the phenomenon of apparently instinctively composed music which demonstrates 'coherence in the face of no theory'. [1] Furthermore, the problem with much analysis of contemporary music, he argues, is the fact that it concentrates largely on compositional method (what Molino/Nattiez would call the 'poietic' aspects of a work's structure) rather than trying to explain how it makes aural sense (the 'aesthetic' aspects). His article attempts to develop the work he began with Jackendoff on tonal music [2] and to begin to sketch 'a listener-based theory of atonal music'. [3]

Lerdahl prepares his ground by outlining what he sees as the pros and cons of the two main ways in which analysts have already attempted to deal with post-tonal music, namely pitch-class set theory and adaptations of Schenkerian theory. The arguments here have been well rehearsed in many quarters; Lerdahl acknowledges that both approaches are broadly valuable but chooses, as he puts it, 'to focus on their problematical aspects'. [4]

The application of Schenker-derived analytical techniques to

twentieth-century music has had many exponents. The motivation for the application of such techniques to 'modern tonal music' [5] or more recent 'neo-tonal' or 'neo-Romantic' music is fairly self evident: that is, though composers' use of tonality in the twentieth century may differ quite considerably from the clearly functional nature of eighteenth- and nineteenth-century tonality, there is a substantial body of music which is constructed using at least some of the principles of voice-leading, prolongation, harmonic directedness and closure which characterise a functional tonality, even if its use involves a certain degree of contradiction or conscious opposition. The list of such modern tonal composers is large, but no doubt includes Britten, Copland, Elgar, Gershwin, Mahler, Nielsen, Prokofiev, Shostakovich, Sibelius, Tippett and Vaughan Williams along with, more recently, such figures as Robin Holloway, Nicholas Maw and Robert Simpson. In analytical terms, the work so far undertaken has produced some interesting results, particularly with regard to the application of adapted forms of Schenkerian techniques, though not of course without their problems. [6] Derrick Puffett, in his article on Tippett, would seem to sum up the central concern of many of these analysts when he writes:

A Schenkerian analysis, of Tippett or any other composer, succeeds to the extent that background and foreground are integrally connected: obviously the techniques of prolongation will vary from case to case, but in all cases one must be able to establish a significant relationship between large-scale structure and smallest detail. [7]

Yet, despite his apparent success in being able to produce an, if not conventionally Schenkerian, at least conventionally Salzerian, graph on three distinct levels showing a clear five-note upper-voice descent and

a I-CS-V-I bass arpeggiation, Puffett is still (healthily) sceptical about the status of what he has produced:

What is the value of such an analysis? Precious little, if it is judged by the conclusiveness of its results. Tippett's fugue has been shown to be, if not beyond analysis (other methods may be more successful), then at least, and predictably, beyond Schenker. Yet perhaps the very inconclusiveness of the analysis is its best achievement. An analysis laid out in a set of graphs which can be challenged, corroborated or simply thrown away shows us the exact nature of Tippett's tonal language, in that it demonstrates, through its failure as much as through its success, the extent to which that language is tonal and the manner in which it is so'.

[8]

This is an argument I find particularly attractive. Puffett is not just using an analytical technique as self-critique, though that in itself is useful (how far am I prepared to push this technique and at what point do I admit that it has broken down?); he is drawing positive conclusions from the necessarily incomplete nature of his results. How far is this piece tonal and how far can a theory designed to deal with unambiguously tonal music go in demonstrating what sort of tonality is at work here? As Puffett puts it:

To say, with Tippett, that his Second Quartet is 'In F#' is to make certain assumptions. Whether we agree with him will depend on what definition of tonality we adopt ... These [voice-leading graphs] enable us to see accurately what kind of tonality is in question. [9]

By admitting that Tippett's fugue is, at least in part, 'beyond Schenker', he is telling us something useful about the piece but is by no means excluding the possibility of the use of other different or complementary analytical techniques which could tell us something about

those bits of the structure which do not work tonally. One such approach, he suggests, is based on inversional symmetry. What is crucial, it seems to me, is to acknowledge the kinds of structural contradictions inherent in this music. This Puffett does by noting the structural discrepancy between harmonic and contrapuntal considerations and concludes that:

... a certain amount of tension between the various musical elements – harmony, counterpoint, and the like – is inevitable in a more modern piece, and that such a tension, far from being something to be regretted, should be valued as a source of satisfaction. [10] [my emphasis]

Puffett's acknowledgement that 'a certain amount of tension between the various musical elements ... is inevitable in a more modern piece' is not at all far removed from Whittall's proposition outlined in the previous chapter with regard to modernism in music i.e. a balance of discontinuities.

The more general application of Schenkerian techniques to modern music (i.e. not just to post-Romantic, modern tonal or neo-Romantic music) has met with similar methodological difficulties and has been greeted with a mixed critical response. The motivation for such activity would seem to be an implicit or explicit desire on the part of theorists to align the music of the twentieth century with the common practice of the preceding three hundred years. At least, this is the most obvious interpretation. In Britain, and more so in continental Europe, the Schenkerian tradition has been less than fully absorbed by the theoretical and analytical community; in North America Schenkerism has become the theoretical yardstick, the sine qua non of analysis, and a failure to judge one's analytical methods against those of Schenker (or

how his work has been interpreted in America) is regarded, at the very least, unfavourably, as William Rothstein has shown. [11] Jim Samson has observed that the history of the reception, development and return to Europe of American Schenkerism also needs to be recognised:

No doubt some future history of ideas will make much of the way holistic doctrines of German origin have been strained through an American empiricist net to produce clean, efficient analytical techniques, unpolluted by troublesome issues of context or mediation. [12]

Samson places set theory alongside the reliance on Schenkerian methods as an equivalent 'clean, efficient analytical technique'.

Interestingly, as a Briton, he advocates that all such thinking be kept 'at a careful distance', although not without acknowledging that 'we should also learn what we can from it'. [13] Such scepticism is crucial, I believe, in helping place the substantial achievement of American and Americanised theory into a broader context, particularly in a century where, as we have seen, a unitary and unified view of a culture and its products would seem to be, at best, inadequate.

Early adaptations of Schenker's thinking to cope with atonal music have been widely discussed and the arguments need not be rehearsed at length here. Still the most thorough account of such analyses is to be found in James Baker's essay on Schenkerian analysis and post-tonal music where he succinctly evaluates the contributions of Adele Katz, Robert P. Morgan, Felix Salzer and Roy Travis in dealing with what, thanks to Forte, has become known as the atonal canon (essentially the post-tonal, pre-serial music of Schoenberg, Berg and Webern, as well as Debussy, Stravinsky and Bartók). [14]

Of all these attempts, the most controversial is that of Roy

Roy Travis: Analysis of Schoenberg, Op. 19, No. 2

(Copyright 1913, Universal Edition, Vienna)

Handwritten musical score for a piece titled "passing". The score consists of two staves. The top staff begins with a treble clef and a key signature of one flat (Bb). The bottom staff begins with a bass clef and a key signature of one flat (Bb). The music is written in a style that suggests a 19th-century composition, with various ornaments and slurs. The title "passing" is written in a large, stylized font at the bottom. The score is annotated with various notes and symbols, including a large "C" at the end, a "passing" label, and a "C" at the bottom right. The notation includes a treble clef, a bass clef, a key signature of one flat (Bb), and a time signature of 3/4. The music is written in a style that suggests a 19th-century composition, with various ornaments and slurs. The score is annotated with various notes and symbols, including a large "C" at the end, a "passing" label, and a "C" at the bottom right.

Travis [15], and in particular his analysis of Schoenberg's Op. 19, No. 2. [16] Travis represents the nine-bar movement as a connected tonal structure with an incomplete V-I bass arpeggiation (see Ex. 2-1). What suggested this analysis to him is the high degree of repetition throughout the piece of an invariant G-B dyad plus a bass descent from G to C in the final bars, reminiscent of tonal practice. Certainly, one would not wish to deny that such elements suggest or refer to tonal music, but is their presence in themselves enough to justify an integrated tonal reading of the whole? I suspect not, any more than, say, the appearance of a sequence of apparently 'tonal' major/minor third dyads in the twenty-first song of Pierrot lunaire locates it in any particular key: their role, I would argue, is merely referential, suggestive of the 'alter Duft', but only a brief gesture, a snatched 'scent on the wind', tonality in quotation marks. There is nothing to suggest a functional use of tonality by Schoenberg in this instance.

Joseph Straus is one who has been critical of Travis's attempts to 'uncover prolongational middleground structures in post-tonal music'. [17] After identifying four conditions necessary, he claims, for prolongation [18], he goes on to consider Travis's analysis of Op. 19, No. 2 which fails to fulfil any of these four conditions, and so, Straus concludes, 'this music cannot be meaningfully discussed in terms of prolongation. For this piece, at least, prolongation is an anachronism'. [19] The circularity of his argument is an obvious weakness - a feature which Lerdahl has been quick to point out [20] - yet despite this inflexibility in defining the role of prolongation in post-tonal music, Straus's general observations are nevertheless ones with which I would concur, i.e. that a 'full analysis of this piece

requires an explanation ... that does not deny its obvious tonal reference' [21] and that, presumably, places such a view within the context of the many other non-tonal aspects of the piece. What Straus proposes is a 'less comprehensive but more defensible model of voice leading, one based on association rather than prolongation ... [which] draw[s] together elements separated in time and create[s] coherence at the middleground'. [22] His argument is illustrated by examples from Webern, Bartók and Stravinsky, as well as his own discussion of Op. 19, No. 2. In the case of the Schoenberg movement he attempts to show that '[b]eneath a surface suggestive of tonality, Schoenberg constructs a network of motivic associations'; the piece's tonal allusions are thus placed 'in a theoretical framework within which we can make meaningful analytical assertions about them'. [23]

So it transpires that Straus is really an orthodox Schenkerian who, in his own word, cherishes the concept of prolongation, and is not prepared to see it watered down to embrace anything other than the music for which its originator intended it. Apart from the fact that I have always found such religious devotion, not only to the spirit but to the letter of Schenker's theory, unacceptably unquestioning and inflexible, it does mean that Straus's hands are tied. To expect to find perfectly formed tonal prolongations in post-tonal music is perhaps rather naive in the first place, but to deny the possibility of even localised/ contextualised prolongational procedures is to disallow the richness, even the plurality of much modern music. Rather than being required to behave in one way or the other, it seems perfectly possible that modern music can be both tonal and atonal simultaneously. To consider registral, timbral, metrical, etc., association to be the only means by

which coherence is generated in post-tonal music is to deny much of its substance. I would, of course, concur that the 'basic categories of tonal pitch structure cannot be simply or directly transferred to a post-tonal context' [24] - it is, after all, a different kind of music. But there is also much in atonal music that could readily be described as directed or linear (even if this is simultaneously contradicted by something that is static or circular) and a theory of association, based essentially on identifying abstract patterns of repetition, cannot entirely account for this. Certainly Straus's rather narrow definitions of consonance and dissonance and his insistence on a consistent theoretical basis for making analytical decisions mitigates against more empirically-based analytical procedures. The problem here is twofold: first, the over-riding obsession with theory per se (Straus's need for the construction of a 'theoretical framework' as a prelude to making 'meaningful analytical assertions'); and, second, the expectation of consistent modes of operation across all post-tonal music. As we have seen in Chapter 1, the fact that all this music is called atonal only denotes the absence of a functional tonality and not the corresponding presence of other common unifying features or procedures. I still feel that an all-encompassing theory of atonality is neither possible nor desirable.

James Baker has gone some way in suggesting solutions to these theoretical problems. In his analysis of Schoenberg's Op. 19, No. 1, he proceeds from evidence (both from Schoenberg's writings and his music) that 'octave equivalence was a potent structural force in Schoenberg's perception of his music' [25] and applies Schenkerian concepts of coupling and voice-exchange in order to demonstrate 'a number of

Ex. 2-2

James Baker: Alternative Fundamental Structures in E or B for
Schoenberg, Op. 19, No. 1

0-1 2 3 4 5 6 8 10 11 12 13 14 15 17

The musical score is divided into two systems, labeled 'a' and 'b'. System 'a' consists of a grand staff with a treble and bass clef. The treble staff contains a melodic line with fingerings 5, 4, 3, 2, and (1). The bass staff contains a bass line with figured bass notation: V, I, and V. System 'b' also consists of a grand staff. The treble staff contains a melodic line with fingerings 8, 7, 6, 5, (4), 3, 2, and (1). The bass staff contains a bass line with figured bass notation: I, V, IV, and I. Above the staves, a series of numbers (0-1, 2, 3, 4 5, 6, 8, 10, 11, 12 13 14, 15 17) are aligned with specific notes in the music. The notation includes various musical symbols such as notes, rests, and slurs.

important relationships between non-consecutive elements, including long-range correspondences which affect the perception of coherence of the work as a whole'. [26] He presents two hypothetical Fundamental Structures for the piece - in E major and in B major (Ex. 2-2) - and concludes that, despite the equivocal projection of tonality, 'the composition provides strong evidence of the employment of a structural bass in the Schenkerian sense' and that the Schenkerian tonal Ursatz is a useful 'model against which one may measure the relative strength and coherence of pitch relations'. [27] Baker himself acknowledges the advantages of his approach in that it 'draws upon a number of theories [Schoenberg, Schenker, set theory, etc.] yet ... proceeds within the context of the composition on the basis of very few assumptions'. [28] Thus, unlike Travis, and possibly in answer to Straus, he shows how 'Schenkerian principles may be invoked without imposing the possible extraneous notions of diatonic functional tonality upon the music.' [29]

So-called 'transitional' music has proved a useful, and perhaps less controversial, testing ground for the application of adapted Schenker-derived analytical techniques in conjunction with set theory. The reasons for such theoretical applications are relatively self-evident in the context of musics which appear to straddle tonal and post-tonal eras, namely the music of such composers as Debussy and Skryabin, as well as Bartok, Hindemith and Stravinsky. The work of earlier composers which sometimes seems to anticipate certain twentieth-century procedures, most notably that of Liszt, has also been brought under scrutiny. [30] The earliest attempts to come to terms critically with such music were made by Katz. [31] Her work on Debussy and Stravinsky in particular is interesting for what she discovers it is

Impossible to say about their music using Schenkerian techniques.

Salzer has had more success with a variety of pre- and post-tonal musics in demonstrating their apparent tonal coherence but it is again often what Salzer does not say about the music (the often tantalising lack of commentary on his graphs) that is equally revealing. [32]

As suggested by Puffett's discussion of Tippett, other writers have attempted to find ways of 'plugging the gaps' – that is, where a transitional music seems to show characteristics of both tonal and atonal music at the same time, different techniques have to be used to talk about these different aspects. Widely discussed is Baker's stimulating analysis of Skryabin's Enigme, Op. 52, No. 2 which combines voice-leading and set-theoretic techniques in its attempt to show that 'tonal forces ... are responsible in large part for the overall coherence' of the piece without denying the structural role played by whole-tone configurations and complementary pitch-class (pc) sets. [33] The tonality in Enigme, according to Baker is 'implicit' and, as Dunsby and Whittall have commented, the 'justification for voice-leading analysis ... seems to be primarily through reference to an implied diatonicism'. [34] The fact is, a 'tonality without either a[n explicit] tonic triad or any actual, diatonic consonance is inherently highly unstable'. [34] There is only an implied resolution to the tonic after the end of the piece (see Ex. 2-3). What justification, any more than one finds in Travis's analyses, is there for the consistent application of tonal analytical techniques? However, according to Dunsby and Whittall, Baker argues his case that the 'presentation and prolongation [of a diatonic triad] are close enough to those of tonal orthodoxy for it to be defined as Db major dominant, despite the absence

Ex. 2-3

James Baker: Background Analysis of Skryabin, Enigme, Op. 52, No. 2

Background:

The musical score is for a piece titled "Background" from Skryabin's "Enigme, Op. 52, No. 2". It is written for piano in G major and 2/4 time. The score consists of two staves: a treble staff and a bass staff. The treble staff contains a melodic line with a hat symbol (^) over the first measure, a slur over measures 2-3, and a slur over measures 4-5. The bass staff contains a bass line with a slur over measures 2-3 and a slur over measures 4-5. Roman numerals V, (I?), and V are written below the bass staff. Measure numbers 23 and 47 are circled above the treble staff.

of the Db major tonic'. [36] The question, of course, is what we mean by 'close enough'; by what criteria can we judge that a piece is 'close enough' to a tonal piece to justify the adoption and adaptation of Schenkerian analytical techniques? On the one hand, we have a set of conditions for defining the legitimacy of tonal prolongational structures such as those proposed by Straus, but they, as we have seen, are too inflexible; on the other hand, the slightest hint of diatonic components have led Travis to view a distinctly atonal piece in tonally connected terms. Empiricism too has its pitfalls. What is essential, I would argue, is being able to demonstrate clearly the connection and/or complementation between the tonal elements in the music and whatever else is seen to be supporting or contradicting them. Baker goes some way to achieving this, but ultimately does not succeed in integrating the two separate strands of his analyses. Samson neatly summarises Baker's work on Skryabin:

At its best ... his compound methodology is genuinely illuminating, offering a systematic means of assessing the relative weighting of tonal and atonal elements in the structure. But the methods themselves (and therefore the kinds of structure they are capable of revealing) remain conceptually and practically distinct, albeit capable of intersecting in many ways. [Samson's emphasis] [37]

Lerdahl has adopted a similar viewpoint. The basis of his argument is that we do not have different 'listening mechanisms' for tonal and atonal music and so to have two distinct analytical theories for each kind of music is psychologically implausible. Because atonality emerged 'smoothly' from tonality, any theory designed to explicate them should be similarly (smoothly?) connected. [38] As for

the work of Baker, and also of Forte, he is dismissive:

It does not suffice to apply pitch-set theory to underlying quasi-Schenkerian levels for atonal music ... even though this technique may be illuminating in particular cases. Such a mixture is theoretically unsatisfying; it does not establish any real connection between the theories of the two idioms. What is needed is a theory that is general enough to underlie both idioms yet flexible enough to adapt to the ways in which the idioms differ and intermix. [39]

Again, as with Straus, we see here an overriding obsession with watertight theory for its own sake. But he does draw a similar conclusion to Samson, i.e. that an ad hoc kind of comparative analysis is less informative than being able to bring various analytical techniques to bear on a piece and/or repertoire within a clearly defined yet flexible context.

Lerdahl's proposal aims to achieve this flexibility through generality. As I have already noted, he is in search of a 'listener-based theory of atonal music' which attempts to incorporate the insights afforded by both the Schenkerian and set-theoretic perspectives but which also takes into account the ways in which listeners 'predict heard hierarchical structures' from 'particular musical surfaces' [40], a procedure derived from his earlier work on tonal music as set out in A Generative Theory of Tonal Music (henceforth GTTM). Inevitably, as Lerdahl points out, his theory will work better for music that combines tonal and atonal elements [41] and in his analyses of various piano pieces by Schoenberg he shows how, though traditional tonal analytical categories are not evoked, they are nonetheless 'able to convey intuitions of elaboration and linear connection that are fundamental to

any understanding of the piece[s]'. [42] Thus at the centre of his proposition is the belief that 'an atonal prolongational theory can be developed in a way that sheds its Schenkerian origins ... [and] can relate atonal to tonal prolongation at a[n] ... abstract level'. [43] The essence of this generalised approach can be seen in the categories of connection that he expounds which he argues can be adapted at an abstract level in both tonal and atonal music – namely, connections between musical events that are a) the same, b) the same in altered form, and c) different. [44] Logically, there are no other possibilities. What Lerdahl does not discuss, however, is the possibility of no connection at all; every event belongs to a connected whole by means of strong or weak prolongation, or progression. Despite distancing himself from orthodoxly Schenkerian and orthodoxly set-theoretic methods, he still implicitly embraces the synthesising tendencies of both these approaches. Connection rather than opposition lies at the heart of Lerdahl's theory.

Nevertheless, he brings refreshing new insights to the analysis of atonal music. One advantage of his psychologically motivated approach is that it provides a firmer basis on which decisions can be taken about segmentation, the Achilles heel of much pc set analysis. From GTTM Lerdahl takes two rules, founded on psychological grounds, and applies them in the context of pc set theory. These are:

- 1: well-formedness rules (WFRs), which 'specify the possible structural descriptions'. In the case of atonal music, grouping WFRs operate exclusively on the level of the pitch, 'permitting horizontal, vertical, and diagonal segmentations'.
- 2: preference rules (PRs), which 'designate out of the possible

structural descriptions those that correspond to experienced listeners' hearings of any particular piece'. In the case of atonal music, grouping PRs 'for proximity, similarity, and parallelism find counterparts in set segmentation'. [45]

As Lerdahl puts it, 'segmentation in terms of WFRs and PRs could accomplish a degree of predictiveness that is currently lacking in pitch-set theory'. [46]

Having segmented the musical surface, the next stage is to establish a hierarchy of individual pitches within each of these sets, something which is lacking in pc set theory, by the application (in the absence of the stability conditions found in tonal music) of rules of contextual saliency which look for metrical strength, registral extremes, motivic significance, and so on. This reductive process is necessary for the establishment of hierarchies and its flexibility, as well as the way in which it acknowledges the structural significance of non-pitch materials, is to be welcomed. However, the Schoenberg analyses reveal a degree of ambiguity in the application of these rules. For instance, why should it be assumed that, out of the context of tonal counterpoint, 'the most important pitches are those in the outer voices'? [47] A number of writers have challenged this assumption by suggesting that the lack of a distinct bass is a defining feature of much post-tonal music. For example, Jonathan Harvey has proposed that the 'bass moves into the middle: this is our musical revolution' [48] and Dunsby and Whittall have developed this into a stimulating discussion of harmony and symmetry in relation to the same Schoenberg piano pieces analysed by Lerdahl. [49] Other decisions are equally ambiguous. Take, as one example, Lerdahl's choice of the melodic note E

Ex. 2-4

Fred Lerdahl: Analysis of the Opening of Schoenberg, Op. 11, No. 1

The image displays a musical score for the opening of Schoenberg's Op. 11, No. 1, with extensive analytical annotations. At the top, a large triangular diagram is drawn over the first system of music, with lines connecting various notes and rests, likely representing a tonal or structural analysis. Below this, the score is written on multiple staves. The first system includes a treble and bass staff. The second system is labeled 'TSR' on the left. The third system is labeled 'PR' on the left. The fourth system is labeled 'mm. 1-8' on the left. The fifth system is labeled 'mm. 9-11' on the left. The sixth system is labeled 'mm. 12-14' on the left. The score includes various musical notations such as notes, rests, and accidentals. There are also some handwritten annotations and markings throughout the score, including a large 'X' over the first system and some numbers and letters in the margins.

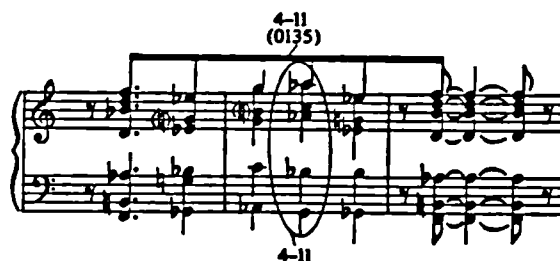
in b. 3 of Op. 11/1 as his 'head tone' of the set to which it belongs (see Ex. 2-4). He later admits to 'doubts' concerning his choice but justifies it 'because it is next to a grouping boundary ... and because it forms a [0147] set, motivically close to measure 4'. [50] Why not the F? It is certainly metrically and durationally stronger and parallels the choice of G in b. 2. Lerdahl does not tell us. Once again, theory rather than the requirements of the musical surface seem to be dictating interpretative decisions; his argument, at times, appears as guilty of the circularity of which he accused Straus.

Lerdahl's definition of what he means by prolongation is not always clear in practice. The middleground connections indicated in his graphs by means of tree diagrams give us some idea but at times I find it difficult to see how harmonies are prolonged. Why, for example, is the principal hexachord of Op. 19/6 deemed to be prolonged? Certainly, the opening sonority is repeated in b. 3, but does this amount to 'strong prolongation' as Lerdahl claims? Even when other events intervene between statements of the hexachord Lerdahl makes no case as to why these might not be regarded simply as something different (melodic as opposed to harmonic events?) rather than prolonging and remaining under the control of the hexachord. Straus of course argues that 'mere departure and return do not constitute prolongation'. [51]

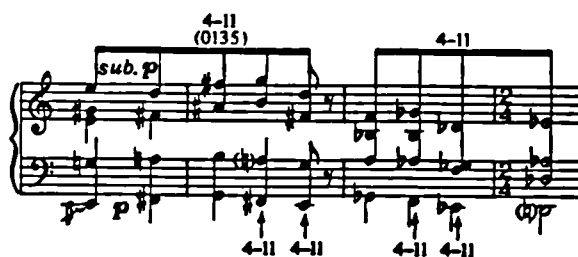
Straus's definition of prolongation is made absolutely clear. In his 1987 article he makes reference to earlier analytical work of his which discusses 'mimicry of the prolongational types of tonal music without their original significance'. [52] In a study of the Symphonies of Wind Instruments he attempts to demonstrate how what he identifies as an important surface melodic and harmonic component, pc set 4-11, also

Ex. 2-5

Joseph Straus: Associational Background of Stravinsky,
Symphonies of Wind Instruments



Principal melodic fragment in Stravinsky, *Symphonies of Wind Instruments*



The principal fragment transposed



Associational background of Stravinsky, *Symphonies of Wind Instruments*

controls musical motions at the highest level – see Ex. 2-5. [53] The resulting large-scale bass motion outlines three of the four notes of the set (F, E & D), widely separated, and the pattern is completed with the C at the 'dramatic climax' of the piece and again at the end of the final chorale. This descent is echoed elsewhere in the piece. He has brought to our attention a similar process involving the same set in the exposition of the first movement of the Symphony in C [54] and this is discussed in more detail in Chapter 3. Such an approach shows a fascinating fusion of set-theoretic and voice-leading techniques which might appear, on first acquaintance, to get round the theoretical problems evinced by the work of Baker and Lerdahl. However, although Straus considers such a pattern to be common in post-tonal music, his orthodoxy does not allow him to give full structural weight to it: 'The descent cannot be considered prolongational' [55] for the reasons outlined earlier. Yet Straus does not then tell us what the significance is of the discovery of this pattern. Does it imply a background continuity which underlies and 'unifies' the disruptive surface juxtapositions? Does it help account for the sense of synthesis or resolution suggested by the arrival of the final chorale? Or does it merely indicate the linearity of the intersections of one particular stratum, to use Edward Cone's terminology? [56] As Lerdahl suggests, a more flexible approach to the interpretation of such information is required 'that sheds its Schenkerian origins' and, I would argue, the means need to be established that enables the work's essential and irreducible oppositions to be balanced meaningfully with the kinds of continuities demonstrated by Straus. This holds true for much post-tonal music.

The musical examples discussed in the remainder of Part II and Part III do not reveal the principles of their structural organisation on the application of a single analytical method. Neither Schenker-derived voice-leading techniques nor Fortean set theory, nor even Lerdahl's more general and flexible psychologically-based methods, can account for all aspects of the structure of the music of Stravinsky, Varèse and Birtwistle, the composers selected for more detailed scrutiny below. Indeed, as was discussed in Chapter 1, the very expectation of a unitary understanding of twentieth-century music is an inappropriate one given the general tendency of modern culture towards fragmentation, disunity and opposition. This does not mean to say that certain features of a work's harmonic organisation cannot be accounted for in terms of pc set structure, or that the development of aspects of its linearity are not usefully explored by invoking concepts of prolongation, but these are not in themselves the whole story. In the case of transitional music, theorists such as Baker and Forte have acknowledged the validity of the application of more than one method but, as seen above, their mixing of methodologies has been criticised as being theoretically unsatisfying because it does not establish any real connection between the theories of the tonal and atonal idioms. Straus has attempted to circumvent this problem by fusing the two methodologies in the large-scale 'prolongation' of a locally prominent pc set, but this only seems to be searching to validate non-tonal music in connected quasi-Schenkerian terms, even while taking account of the fundamental differences between the two idioms. Lerdahl has shown the most flexible approach and his rules are the most generally applicable of any theory of atonality so far developed. His analyses reveal a willingness to allow for more than

one reading of the same musical events though even he does not yet seem to have developed the theoretical criteria by which he can do more than compare his results (they are, as it were, alternative readings generated by the application of his rules between which it is impossible to decide, rather than an expression of any deeper structural opposition or polarity).

The so-called empirical approach to the analysis of twentieth-century music which I advocated in Chapter 1 is the starting-point for the analyses which follow. Common analytical strategies emerge as a result of the process of analysis rather than being determined a priori within the context of any specific theoretical framework. This is not because I believe theory to be impotent but because both the lack of a common practice in the twentieth century and the plurality of individual modern works of art necessitate a multi-dimensional enquiry, i.e. a broader perspective than any one theory so-far developed can provide, an enquiry that begins with the piece and proceeds inductively. The purpose of the following analyses is to attempt to account for the coherence of the music under examination but without imposing on the music any extrinsic notion of what might constitute that coherence, which in any case is likely to differ from piece to piece or composer to composer. I shall use aspects of theories of atonal harmony or prolongation where pertinent though never as a means of trying to discover some hidden unity. Such methodologies may well be useful in identifying constituent elements of a musical structure but when these elements embody a deeper contradiction which cannot be resolved a new understanding of coherence is necessary. This is where the aesthetic issues discussed in Chapter 1 become useful in suggesting means of

controlling, containing or balancing the contradictions without diminishing the intensity of those contradictions.

I have selected the music of Birtwistle for analytical scrutiny in Part III because, as stated at the outset of Chapter 1, his music is generally recognised to display a strong coherence and stylistic consistency and yet has remained relatively impervious to any detailed exegesis. His music is a waking embodiment of Lerdaahl's nightmare: 'coherent in the face of no theory'. For this reason, if for no other, his work is of fascination to the musician and a challenge to the analyst. Stravinsky is the subject of Chapter 3 firstly because his work prepares the way for any serious study of Birtwistle's music, and secondly it proves to be an intriguing testing ground for the theoretical propositions explored in this chapter within the aesthetic framework of modernism.

NOTES

- 1 Fred Lerdahl, 'Atonal Prolongational Structure', Contemporary Music Review, Vol. 4, 1989, p. 65. See also his 'Cognitive Constraints on Compositional Systems' in John Sloboda, ed., Generative Processes in Music: The Psychology of Performance, Improvisation, and Composition (Oxford: Clarendon, 1988), pp. 231-59
- 2 Fred Lerdahl & Ray Jackendoff, A Generative Theory of Tonal Music (Cambridge, Mass.: MIT Press, 1983). The question of contemporary music is only briefly raised in this book - see pp. 296-301
- 3 'Atonal Prolongational Structure', p. 65
- 4 Ibid., p. 66
- 5 Whittall's phrase - see his discussion of symphonic music in Music Since the First World War (London: Dent, 1977), pp. 9 ff
- 6 Examples of such work include: Steven E Gilbert, 'Gershwin's Art of Counterpoint', The Musical Quarterly, Vol. 70, No. 4, 1984, pp. 423-56; Robert F. Jones, 'Tippett's Atonal Syntax' in Geraint Lewis, ed., Michael Tippett OM: A Celebration (Tunbridge Wells: Baton, 1985), pp. 119-42; Christopher Mark, 'Contextually Transformed Tonality in Britten', Music Analysis, Vol. 4, No. 3, 1985, pp. 265-87; Derrick Puffett, 'The Fugue from Tippett's Second String Quartet', Music Analysis, Vol. 5, Nos 2/3, 1986, pp. 233-64; John Williamson, 'The Structural Premises of Mahler's Introductions: Prolegomena to an Analysis of the First Movement of the Seventh Symphony', Music Analysis, Vol. 5, No. 1, 1986, pp. 29-57. Arnold Whittall addresses the theoretical problem as follows:

I do not apply a 'theory' to the music of Britten and Tippett; still less do I demonstrate in detail how every structural level functions in every piece. But I do comment on how certain features which I regard as crucial to structure and expression establish contacts between the particular qualities of the individual piece and those more general aspects of hierarchic musical structure which Schenker and his successors have placed in high relief. (The

Music of Britten and Tippett. Studies in Themes and
Techniques (Cambridge: CUP, 2nd ed. 1990), p. 9)

- 7 'The Fugue from Tippett's Second String Quartet', p. 247
8 *Ibid.*, p. 258
9 *Ibid.*, p. 260
10 *Ibid.*
11 'Now [1986] Schenker had become so fashionable that he was being paid the ultimate American compliment: he was being vulgarized'. William Rothstein, 'The Americanization of Heinrich Schenker', In Theory Only, Vol. 9, No. 1, 1986, p. 6
12 T. J. Samson, review of James Baker, The Music of Alexander Scriabin, in JMT, Vol. 32, No. 2, 1988, p. 354
13 *Ibid.*
14 James Baker, 'Schenkerian Analysis and Post-Tonal Music' in David Beach, ed., Aspects of Schenkerian Theory (New Haven: Yale University Press, 1983), pp. 153-86
15 Most notably, 'Directed Motion in Two Brief Pieces by Schoenberg and Webern', PNM, Vol. 4, No. 2, 1966, pp. 85-9, and 'Tonal Coherence in the First Movement of Bartók's Fourth String Quartet', Music Forum, Vol. 2, 1970, pp. 298-371
16 'Directed Motion in Schoenberg and Webern'
17 Joseph N. Straus, 'The Problem of Prolongation in Post-Tonal Music', JMT, Vol. 31, No. 1, 1987, pp. 1-21
18 1: a clear distinction between consonance and dissonance; 2: a consistent means of assessing the relative structural weight of consonances; 3: a consistent way in which greater structural tones can be embellished; 4: a clear distinction between harmony and voice-leading. *Ibid.*, pp. 2 ff
19 *Ibid.*, p. 10
20 'Atonal Prolongational Structure', p. 67
21 'The Problem of Prolongation in Post-Tonal Music', p. 10. What Straus means by a full analysis, I am not sure. A broader analytical view is certainly what is necessary here.
22 *Ibid.*, p. 13
23 *Ibid.*, p. 19
24 *Ibid.*, p. 10

- 25 James M. Baker, 'Voice Leading in Post-Tonal Music: Suggestions for Extending Schenker's Theory', Music Analysis, Vol. 9, No. 2, 1990, p. 180
- 26 *Ibid.*, p. 197
- 27 *Ibid.*, p. 196
- 28 *Ibid.*, p. 197
- 29 *Ibid.*, p. 198
- 30 Allen Forte, 'Liszt's Experimental Idiom and the Music of the Early Twentieth Century', Nineteenth Century Music, Vol. 10, No. 3, 1987, pp. 209-28.
- 31 Adele Katz, Challenge to Musical Tradition: A New Concept of Tonality (London: Putnam & Co., 1945)
- 32 Felix Salzer, Structural Hearing: Tonal Coherence in Music (New York: Dover, 1962)
- 33 James Baker, 'Schenkerian Analysis and Post-Tonal Music', p. 179. Baker's work is critically evaluated by Anthony Pople in Skryabin and Stravinsky 1908-1914: Studies in Theory and Analysis (New York: Garland, 1989) where he develops his own methodological principles in relation to the music of Skryabin and Stravinsky. See also Pople's review of Baker, The Music of Alexander Scriabin, in Music Analysis, Vol. 7, No. 2, 1988, pp. 215-25
- 34 Jonathan Dunsby & Arnold Whittall, Music Analysis in Theory and Practice (London: Faber Music, 1988), p. 111
- 35 *Ibid.*, p. 112
- 36 *Ibid.*, p. 113
- 37 T. J. Samson, review of James Baker, The Music of Alexander Scriabin, p. 355
- 38 'Atonal Prolongational Structure', p. 67
- 39 *Ibid.*
- 40 *Ibid.*, p. 68
- 41 *Ibid.*, p. 84
- 42 *Ibid.*, p. 82
- 43 *Ibid.*, p. 68
- 44 *Ibid.*, p. 75
- 45 Definitions of the rules are taken from GTTM, p. 9. The descriptions of their application to pc set theory are taken from

- 'Atonal Prolongational Structure', p. 68
- 46 'Atonal Prolongational Structure', p. 68
- 47 Ibid., p. 40
- 48 Jonathan Harvey, 'Reflection After Composition', Contemporary Music Review, Vol. 1, Part 1, 1984, p. 83. First published in Tempo, No. 140
- 49 Dunsby & Whittall, op. cit., pp. 123-30
- 50 'Atonal Prolongational Structure', p. 82
- 51 'The Problem of Prolongation in Post-Tonal Music', p. 6
- 52 Ibid., p. 17
- 53 Joseph Straus, 'A Principle of Voice Leading in the Music of Stravinsky', Music Theory Spectrum, Vol. 4, 1982, pp. 106-24
- 54 Joseph Straus, Remaking the Past. Musical Modernism and the Influence of the Tonal Tradition (Cambridge, Mass.: Harvard University Press, 1990), pp. 100-1
- 55 'The Problem of Prolongation in Post-Tonal Music', p. 17
- 56 See Edward T. Cone, 'Stravinsky: the Progress of a Method', PNM, Vol. 1, No. 1, 1962, pp. 18-26. This is discussed more fully in Chapters 3 & 7

B NK PAG

CHAPTER 3

Aspects of Voice-Leading and Prolongation in the Music of Stravinsky

Introduction

The music of Stravinsky's so-called neo-classical period offers a fascinating case study in the ways in which it is possible to discuss the roles of voice-leading and prolongational structures which behave, in some respects, analogously to those in tonal music, but in quite different, non-functional contexts. The neo-classical works are not transitional in the sense in which the music of Liszt, Debussy or Skryabin might be deemed to be so; yet their references to tonal structures, while employing aspects of a post-tonal musical vocabulary, raise difficult and important analytical issues which cannot easily be resolved by any one theory. In this respect, they provide a clear and useful model for ways in which to discuss the structure of other modern/modernist works which are concerned with competing or opposed systems or musical languages.

The music of Birtwistle, which is discussed in Part III, evinces such a modernist concern for opposition which is manifest in a number of different ways. In many of his works, the oppositions are not of a simple, single kind; usually, however, it is possible to identify a principal kind of opposition. In the case of works as different as Refrains and Choruses, Punch and Judy and Secret Theatre I define this in terms of an opposition between line and circle, i.e. the horizontal

and the vertical, the 'dynamic' and the 'static' and, by analogy, the tonal and the non-tonal. In many works, Birtwistle can be seen playfully to be setting in opposition mutually exclusive musical systems and materials; yet they do not cancel one another out: the opposition is usually contained or controlled. This control can take many different forms: symmetrical schemes, formal or dramatic designs, motivic connections, etc. But in every case, as will be seen, it provides a meaningful framework for the opposition; it does not serve to undermine it.

Such irresolvable yet balanced oppositions are not, of course, unique to Birtwistle; indeed, his music might best be understood as offering a new response to the modernist challenges posed by earlier composers such as Debussy, Varèse and Stravinsky as well as by an artist like Paul Klee (see Chapter 4). The discussion in this chapter of specific kinds of opposition in certain of Stravinsky's neo-classical works is intended to provide both a model and a context for the analyses of Birtwistle's music which follow. Neo-classical works have been chosen for detailed scrutiny because the question of a specific kind of opposition (namely, between linear and vertical/tonal and non-tonal elements) is clearly defined in these works. Furthermore, these bold oppositions are contained within obvious external frames: the classical symphony in the case of the Symphony in C, the 18th-century number opera in the case of The Rake's Progress.

This is not to suggest that these two works have necessarily been actual models for Birtwistle (though the parallels between The Rake's Progress and Punch and Judy are unmistakable – see Chapter 6). More overtly radical works such as The Rite of Spring, the Symphonies of Wind

Instruments and Agon have had a far greater impact on his work. [1] However, because, as has already been observed, the opposition between tonal and non-tonal elements in the neo-classical works is relatively (albeit controversially) self-evident, the analytical issues are similarly that much more clearly defined. The analytical challenge, as outlined in Chapters 1 and 2, is the attempt to identify the meaningful ways in which the opposition between continuous and discontinuous musical materials can be understood to be balanced or contained, i.e. to attempt to account for the ways in which, in its own terms, the music defines its coherence yet avoids the extremes both of organic wholeness and of random collage.

A number of writers have attempted to address these issues in connection with the more radical works of Stravinsky referred to above. Perhaps the most influential of these has been Edward Cone in his analysis of the Symphonies of Wind Instruments which, though now thirty years old, still possesses a freshness in its approach. [2] Cone identifies and defines modernist techniques of stratification where fragmentary musical materials are successively opposed and kept distinct. Such techniques are similarly important in any understanding of Birtwistle's music: Cone's analysis of the Symphonies provides a useful model for the examination of the stratification of musical materials in works as different as Verses for Ensembles, Earth Dances and even the recent Antiphonies. [3] And, of course, examples of stratified or mosaic-like musical structures can be found in the work of many other twentieth-century composers (which may be understood to anticipate or parallel Birtwistle's works in some way) from Debussy and Varèse to Messiaen and Tippett. [4]

However, Cone also discusses the means by which stratified materials are organised over the larger span of the music and are made to balance or cohere. Interlock, i.e. large-scale connections across local inter-ruptions, is one way in which continuity is effected. Most importantly, the initial stratification of material is not contradicted by the music's movement towards a specific goal ('some sort of unification', as he describes it [5]). Cone's notion of 'synthesis' is one where elements of continuity and discontinuity are held in balance.

Stratification of a different kind from the Symphonies is evident in The Rite of Spring. Here, the simultaneous layering of musical materials is to be found. Distinct musical objects (to use a favourite term of Varèse and Birtwistle) can be discerned, for example, in the 'Procession of the Sage' which is made up of discrete harmonic areas superimposed. The stratification of these repeating musical objects is, of course, as much rhythmic as it is harmonic - something which is equally apparent in both the piano duet version and the full orchestral score. Certain strata are absent from the piano duet score, the most significant perhaps being the pedal D (timpani and contra-bassoons) throughout the section (figs. 67-71), which tends to 'root' the music without contradicting the harmonic/ rhythmic/instrumental separation of each stratum. Forte has attempted to demonstrate how the section is 'contained' by its deep level harmonic connectedness (by means of complementary pc sets) within the work as a whole. [6] In a different way, Stravinsky's invocation of the image of a procession here would seem an appropriate one, allowing the members of that procession to maintain their individual identities while being given a 'collective' meaning in their common movement towards the same goal. The model of

the procession, as will be seen in Chapter 4, is one which Birtwistle has found particularly attractive (The Triumph of Time, Endless Parade, etc.) – where the overall context is defined but within which content can still be flexible and where individual objects are often defined by repetition.

For Stravinsky, as mentioned above, in many of the neo-classical works the context or frame is much more clearly defined than in The Rite of Spring. In the case of Agon, the frame is provided not only by the classical dance movements but by the number twelve: twelve dancers (divided four male, eight female), twelve movements (divided into four groups of three) punctuated by a Prelude and Interludes, and, in places, its twelve-note serial organisation. Within this frame, however, oppositions continue to operate, e.g. successively between diatonicism and chromaticism/serialism – almost an opposition of 'styles' one might say. This model, too, is clearly operative in Birtwistle's music. The discussion below (Chapter 6) of the 'Morals' from Punch and Judy, for example, illustrates the use of a conventional external frame (operatic numbers, dances, etc.) as well as a control provided by the number eleven in terms of rhythmic organisation (see Ex. 6-1) and pitch disposition (Ex. 6-5). In 'Moral I' as a whole only eleven of the twelve pitch-classes are employed (a point made in Ex. 6-4 in relation to the absent centre of G). Yet this is only a context: oppositions retain their potency throughout.

A similar kind of stratification is evident in some of Debussy's music – at its most extreme it presents the analyst with many interesting challenges. The Cone-like stratification through the juxtaposition of musical ideas in Jeux has already been alluded to (the

Ex. 3-1

Debussy, 'Brouillards'

Handwritten musical score for Debussy's 'Brouillards', showing the first system. The score is written for Right Hand (R.H.) and Left Hand (L.H.).

The R.H. staff (top) contains complex, flowing melodic lines with many accidentals (sharps, flats, naturals) and slurs. The L.H. staff (bottom) contains more rhythmic, chordal accompaniment with many accidentals and slurs. The score is marked with various performance instructions and fingering numbers.

Measure numbers 1 through 34 are indicated below the staves. The score is divided into measures by vertical bar lines. The R.H. staff has a key signature of one flat (B-flat) and a time signature of 3/4. The L.H. staff has a key signature of one flat (B-flat) and a time signature of 3/4.

The score is written in a handwritten style, with many accidentals and slurs. The R.H. staff has a key signature of one flat (B-flat) and a time signature of 3/4. The L.H. staff has a key signature of one flat (B-flat) and a time signature of 3/4.

parallels with the Symphonies of Wind Instruments, dedicated 'to the memory of Claude Achille Debussy', are striking). In Jeux, interlock is also clear across successive statements and development of material, and it could be argued that Debussy achieves a degree of synthesis ('some sort of unification' of material) at the end. [7]

The oppositions in a piano miniature such as 'Brouillards' (Prélude 1, Book 2) are much starker. The most obvious opposition in this piece is between the black and white keys of the piano keyboard – clearly seen at the opening where vertically placed 'naturals' in the left hand are set against horizontally placed 'flats' in the right hand. It might even be possible to suggest that there is a structural opposition between 'tonal' elements in the left hand (centred on C) and 'non-tonal' elements in the right hand (possibly centred on Db) which are occasionally brought together. Ex. 3-1 is by no means a complete account of 'Brouillards' (some passages are impossible to graph in tonal terms which, like Puffett's graphing of Tippett's String Quartet No. 2 discussed in Chapter 2, tells us something interesting about the nature of the 'tonal' language in operation here) but it attempts to demonstrate how opposing systems can relate without undermining the strength of the opposition. An alternative reading is presented by Richard Parks, who has used pc set theory to articulate structural oppositions in terms of membership or non-membership of 8-28, the octatonic set. [8] But perhaps the most challenging discussion of this Prélude is that of Dieter Schnebel who suggests that its distinct rhythmic strata are contained in relation to the octaves of the harmonic series according to which, he argues, the pitches are organised. [9] For example, the pitch content of the left hand in the opening two bars

Dieter Schnebel: Analysis of Debussy, 'Brouillards'

[illegible][illegible][illegible]

d) r. H. 

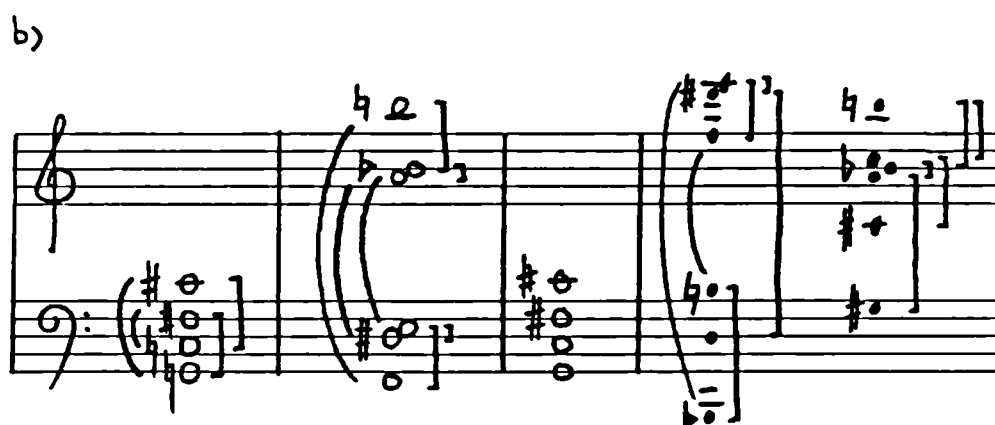
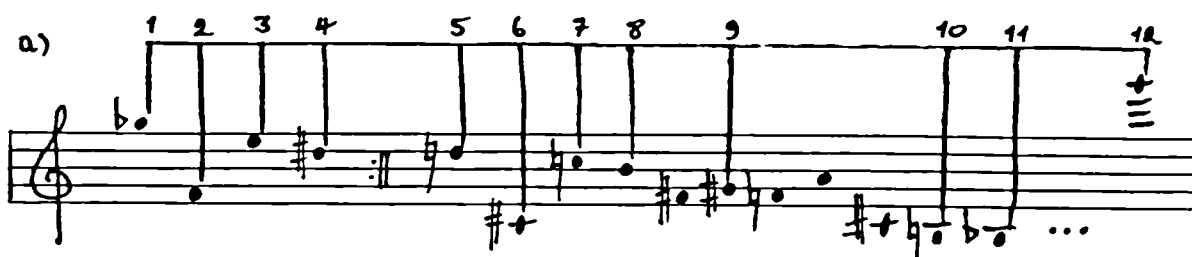
l. H. 

(Ex. 3-2a) comprises the fourth octave of the harmonic series with G as its fundamental (see Ex. 3-2b) while the pitch content of the right hand added to this (Ex. 3-2c) belongs to the fifth octave of the same series; the left hand therefore plays notes of longer durational value (quavers) than the right hand (quintuplet demi-semiquavers) corresponding to their lower frequency (Ex. 3-2d). Rhythmic and pitch material are intimately related yet the strata remain distinct.

In some senses, Varèse's modernism is much more direct and uncompromising than that of either Stravinsky or Debussy. When he wrote of the 'movement of sound masses, of shifting planes ... taking the place of linear counterpoint' [10], he might have seemed to be suggesting a radically new kind of music which eschews any sense of linearity (interlock) in favour of bold and absolute oppositions. Yet there are aspects of Varèse's music which appear linear. There is often a sense of forward motion in opposition to other elements of the music which are 'static' or organised in blocks. Once again, an examination of the 'containment' of the opposition between continuous and discontinuous musical elements presents a fascinating analytical challenge as well as providing a context for the discussion of similar kinds of oppositions found in Birtwistle's music (the parallels between the ideas of Varèse and Birtwistle are discussed at greater length in Chapter 4). The published analyses of Varèse's work are small in number [11] and, as suggested in Chapter 1 (p. 43), the only substantial study – that of Jonathan Bernard – goes too far in implying a synthesis of opposed materials as a result of a too rigorously applied 'theory of trichordal unfoldings'. [12] The first movement of Octandre (1923), for example, shows clearly the opposition between linear and vertical

Ex. 3-3

Varèse, Octandre, I



elements and, moreover, suggests interesting correspondences between its opening and that of Birtwistle's Refrains and Choruses (1957), which is analysed in detail in Chapter 5. The opening of the movement essentially consists of the unfolding of a chromatic linear sequence: the first ten pcs are revealed by the oboe (bs 1–5), the eleventh follows with the entry of the clarinet (b. 6) and the sequence is completed by the oboe at the end of b. 9 with its high G (Ex. 3–3a). The music then rapidly expands, almost explodes, outwards – an example, perhaps, of the kind of movement and collision of sounds of which Varèse spoke. Subsequent passages are much less obviously linear, e.g. at bs 19–22, static harmonic blocks are starkly juxtaposed and there are no immediately obvious connections from bar to bar. However, consistent use of large forms of *ic*1 (major 7th/minor 9th) act to contain the juxtapositions without, in any sense, dissolving their oppositional status (Ex. 3–3b).

As stated above, Birtwistle's music offers a new response to the modernist challenges posed by earlier twentieth-century pioneers such as Debussy, Varèse and Stravinsky. The structure of the music of all of these composers is concerned, in different ways and to different degrees, with competing or opposed systems or musical languages. The balancing of opposed categories – specifically, the use of a non-tonal musical vocabulary within tonal structures – is perhaps at its clearest in Stravinsky's neo-classical works and so this music offers a fruitful testing-ground for the problems of analytical interpretation discussed in Chapters 1 and 2. Certainly, the clearly modern concern of the pieces discussed below with those issues outlined in Chapter 1

(fragmentation, opposition, the use of self-conscious and referential formal devices, etc.) makes them no less appropriate models for the critical examination of later modernistic music than more radical early manifestations of modernism.

Stravinsky, Neo-Classicism and Tonality

Stravinsky's neo-classical music is often discussed in tonal terms. At first sight, this might seem an unremarkable fact given that Stravinsky himself was prone to describing his own music in such a way: Symphony in C, Concerto in D, Serenade in A. These titles invite both listener and critic to understand the music in relation to the earlier models and the tonal system they invoke. Even the most distinguished scholars appear happy to talk about Stravinsky's music in this way, and most seem not in the least uncomfortable with a discussion of Stravinsky's neo-classical music in terms of 'keys'. Take, for example, discussion of The Rake's Progress, a work which could be considered the epitome of Stravinsky's neo-classical outlook (and thus one of the most obvious candidates for exegesis in relation to tonal music – in this case, eighteenth-century operatic models). Both major studies dedicated exclusively to the discussion of this work adopt a vocabulary which is essentially that of functional tonality. Robert Danes, in his exploration of 'neo-classical intent' in The Rake's Progress, writes of its 'ingenious ... use of tonal relationships, none of which are in the least accidental. Sensitivity to and control of keys is one of the strongest organising parameters in the opera, functioning not only on the tonal level but on the symbolic plane as well'. [13] There follows a traditional

'structural analysis' (his term). Danes does acknowledge the possibility that the opera's tonal organisation might occasionally be compromised or ambiguous: 'Stravinsky's use of pan-diatonicism and bitonality serve often to obscure clear key feeling' and when 'two functionally related harmonies [are] superimposed ... [it] makes it difficult at times to identify the prevailing key of a number or section'. [14] Nevertheless, the assumption remains that each number or section must be in one key. Most of the ambiguities he identifies are conveniently discounted as 'colour effects'; contradictory elements are seen (and heard) to be subsumed into the prevailing and controlling tonality and thus their disruptive effect is minimised. This makes it possible for Danes to conclude that, in The Rake's Progress, 'no real tonal ambiguity exists' [15], i.e. any perceived ambiguity is only a surface feature and has no structural role to play.

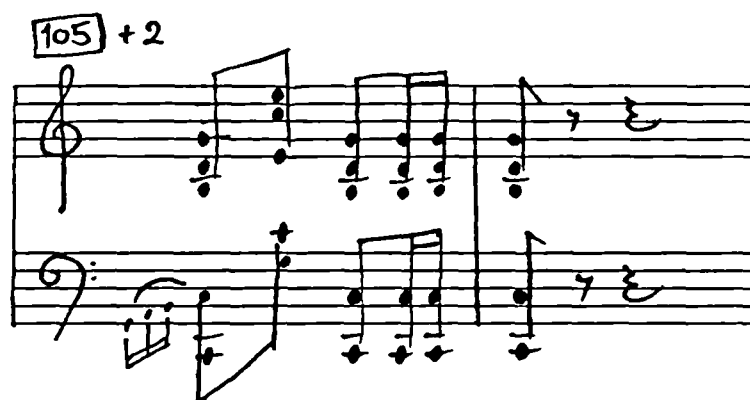
I have profound difficulties with this approach, and below I offer alternative readings of selected passages from The Rake alongside Danes's scrutiny of them. My principal reservation is that such a view downgrades features which I perceive as being crucial to the music's structure – indeed, to Stravinsky's method as a whole. He is not, it seems to me, idly playing with Classical models, twisting key relations here, jazzing up the harmonies there. The Rake is not Così with wrong notes; otherwise it would hardly strike audiences today as the sophisticated and coherent musico-dramatic statement which it evidently is (a piece of sub-Mozartian pastiche would surely not have maintained its position in the repertoire of European and North American opera companies as The Rake has). [16] Fundamental to Stravinsky's language is a notion of irresolvable oppositions (or oppositions that display

degrees of incompatibility), and not least the opposition between past and present, a fact that the composer himself acknowledged on a number of occasions. [17] His most celebrated credo in this regard is to be found in the chapter on 'The Phenomenon of Music' in the Poetics of Music where he states categorically that his compositional interest lies not in generating a functional tonality but in creating order (what he calls 'form') by whatever means: 'A system of tonal or polar centres is given to us solely for the purpose of achieving a certain order, that is to say more definitively, form, the form in which the creative effort culminates'. [18] In other words, an order is imposed on disparate material but one that does not necessarily imply a synthesising or unifying approach. '[O]ur chief concern is not so much what is known as tonality as what one might term the polar attraction of sound, of an interval, or even of a complex of tones'. [19] Stravinsky makes it clear that these poles of attraction are quite independent of the closed tonal system: 'we can bring the poles together without being compelled to conform to the exigencies of tonality'; [20] however, this by no means denies the possibility of working with tonal elements: 'it well may be that I remain for a considerable time within the bounds of the strict order of tonality, even though I may quite consciously break up this order for the purpose of establishing a new one'. [21]

Stravinsky's views should help frame the way in which we might approach The Rake's Progress, where reference is undeniably being made to tonal models but where tonality is not the whole story, i.e. other complementary systems are also in operation which consciously oppose or break up the order tonality appears to establish. Thus, when Paul Griffiths, the author of the other principal study of The Rake, writes

Ex. 3-4

Stravinsky, The Rake's Progress, Act 1/11



that the Duet & Trio which begins Act I is predominantly 'in A major', that the orchestral prelude to the opening Chorus of Act I, scene ii is 'a boisterous introduction in C major with a tipsy middle section in B major', and that the Chorus at the end of the same scene is 'in the key of A major once more' [22], what does he mean? What kind of A, B and C majors is he talking about? What sort of aria in A major contains not a single unadulterated root position triad on A? What sort of A major omits its dominant almost entirely and usually incorporates the 2nd and 4th degrees into the tonic triad, as in the final I/ii Chorus? What sort of B (however tipsy) studiously avoids its dominant and what sort of C contains its own dominant, as in the opening I/ii Chorus (Ex. 3-4)?

There are obviously aspects of the keys Griffiths cites being articulated in these instances – the signatures alone indicate we are meant to conceive of them in relation to tonal models – but there are other things going on besides. Though there does, for instance, appear to be some kind of distinction between 'consonance' and 'dissonance' (one of the primary features necessary for tonality to exist), it is contextually defined rather than being dependent on strict rules of counterpoint – it is, one might say, referentially rather than functionally articulated. There are still hierarchies but they are of a different order from those in tonal music, and certain oppositions remain.

Menachem Zur has commented on this rather peculiar critical situation: 'The early music of Stravinsky is sometimes humorously referred to as "the school of wrong notes" ... [A]ny new musical language which includes a hint of traditional tonality and structure of triads is interpreted as an extension of old, known patterns'. [23]

Other writers have attempted to confront the apparent contradiction between Stravinsky's modern musical language and outlook and his use of older forms and styles. As early as 1954, Robert Craft, writing on The Rake, observed that 'in using old operatic devices and clichés Stravinsky has in fact created fresh and vital music'. [24] After examining part of the first Act II recitative he concludes that 'the question is not whether a composer has used an old pattern, but what he has created with it'. [25] In a perceptive article from 1957, Roger Sessions wrote:

... nothing could be clearer today than the fact that the tradition on which the great fluorescence of the eighteenth and nineteenth centuries was based, has no longer any vitality so far as the present and the future are concerned ... For in spite of its apparent break with everything that bore the imprint of 'modernism' in the nineteen-twenties, and in spite of Stravinsky's very conscious and even outspoken development of impulses derived from certain styles of the past, in his music the familiar concepts have taken on quite different meanings. Tonality, diatonicism, chord-structure – even harmony, rhythm, expressivity – have quite another meaning for him than they had for Haydn or Brahms; and it is futile to apply to his music the analytical criteria which are valid for theirs. [my emphasis] [26]

This then is the nub of the problem for the analyst of Stravinsky's music – and, indeed, more generally of modern music. How is it possible to make sense of the music in its own terms, i.e. without relying entirely on theories and analytical methodologies developed in an earlier age or to cope with tonal music. This is not to suggest that twentieth-century music is utterly independent of the past (though some of it claims to be); far from it: one of the defining characteristics of modernism would appear to be the very self-consciousness of its art

manifested in an acute awareness of the past. To deny the tonal references in Stravinsky's music would be foolish [27]; but to discuss that music purely in terms of tonality is also misguided. It is, as we shall see, the juxtaposition of old and new, and the tension of the ultimate irreconcilability of past and present in Stravinsky's music that gives it its vitality.

Stravinsky himself commented on this relationship between past and present on a number of occasions, not in terms of neo-classicism (a label he abhorred) but in terms of his own compositional procedures:

What interests me, whatever I love, I wish to make my own (I am probably describing a rare form of kleptomania). [28]

Pulcinella was my discovery of the past, the epiphany through which the whole of my late work became possible. It was a backward look, of course ... but it was a look in the mirror too. No critic understood this at the time, and I was therefore attacked for being a pasticheur, ... blamed for deserting 'modernism'. [29]

Critics today are just as capable of mistaking changes in surface style for changes in compositional method. [30]

Perhaps the most significant recent study of the role that music and ideas of the past have played in twentieth-century music is to be found in Joseph Straus's Remaking the Past. Here he discusses not only the music of Stravinsky where there is an explicit confrontation of past and present, but also the works of other modernists (Schoenberg, Bartók, Webern and Berg) which are, he argues, 'remarkably rich in allusions, both overt and concealed, to older music'. [31] Straus describes what he calls the 'stylistic and structural gulf' that separates the tonal and post-tonal elements to be found in much music of the first half of

the twentieth century, but goes on to argue that, because the older elements retain their 'traditional associations', even within the context of the new, 'they become the locus of a productive musical tension'. [32] In the case of Stravinsky, it is the tension between the clear links his music makes with tradition and the ways in which this material is reworked 'in his own image' [33] – the backward look and the look in the mirror. Stravinsky's music is no less 'modern' for the presence within it of aspects of pre-modern music. It is both the reasons for this modern obsession with the past (which leads him towards attempting to develop a theory of musical influence) and the ways in which such a situation can be dealt with analytically that form the substance of Straus's book.

The model for this enterprise is provided by Harold Bloom's work in relation to poetry on the 'anxiety of influence' [34] which concerns itself with intertextual relations whereby poets (and, by analogy, composers) misread and reinterpret the past according to their own individual creative needs. As Straus points out, the application of Bloom's ideas to twentieth-century music is useful not least because it offers an 'antidote to what has become a virtual dogma in music theory: organic coherence ... Old and new are not reconciled or synthesised but locked together in conflict. The coherence of these works is won through a struggle'. [35] This was, of course, the subject of Chapter 1 – modernism in general seems more concerned with the conflict of discrete and distinct ideas (and not only of past and present) held within a coherent but non-synthesising context. This demands a new analytical view: theories designed to look for organic coherence will not be wholly appropriate. As Straus concludes, 'we must not make the

mistake of assuming that the presence of these allusions [to traditional tonal music] requires us to engage the entire apparatus of tonal theory. To do so would result in analytical and critical blunders'. [36] It is of such blunders, I argue, that Danes and Griffiths, among others, are guilty.

However, though vehemently opposed to any wholly organic view of twentieth-century culture, there does appear an implicitly synthesising under-current to Straus's thesis. His reliance on pitch-class set theory ('[one of] our best analytical tools for the post-tonal repertoire' [37]) is one indication of this, i.e. a desire to discover common harmonic practices across works by very different composers. To argue, as I did in Chapter 1, that twentieth-century composers share a (broadly defined) modern/modernist aesthetic is very different from arguing that, despite surface differences, composers are working in the same way. To my mind, this again suggests the theorist's search for some (unachievable) all-embracing theory of atonality. The dominance of older cultures within our present culture and the self-conscious obsession of twentieth-century artists with the past is incontestable, and a theory of influence may be useful in this regard; it is surely, though, the differences between the responses to the past of Schoenberg and Stravinsky that are of significance. I cannot understand why it should be necessary – or, indeed, even possible – to attempt 'to document their common strategies for coming to terms with earlier music'. [my emphasis] [38] The past has provided models for contemporary composers in so many different ways that it would seem highly unlikely that any common strategies exist other than of the most generalised kind. The act of the reinterpretation of the symphony in

the hands of, say, Stravinsky, Sibelius and Maxwell Davies is not enough to suggest a unity of compositional practice between these figures, any more than the modernist concern for past music in Schoenberg, Stravinsky, Berg and Bartók is manifested through common compositional strategies.

In what ways, then, is it possible to develop a meaningful discourse about Stravinsky's neo-classical works that acknowledges the music's indebtedness to earlier tonal procedures yet does not deny its central polarities or oppositions, while at the same time identifying the individuality of Stravinsky's response to these issues within the context of early-twentieth century modernism? The analytical discussion which follows is an attempt to develop such a discourse. It will try to show how the juxtaposition of two competing systems in a single work (which, according to Daniel Albright, is what Stravinsky's music is 'about' – see note 5) does not necessarily imply incoherence but needs to be examined in a different context to allow for a new kind of coherence independent of pre-modern notions of unity and organicism.

'The Rake's Progress'

The insistent reiteration of an E major triad in the Prelude to The Rake's Progress has led commentators into discussing it in traditional tonal terms:

Before the curtain rises there is a brisk, buoyant, fanfare-like summons scored essentially for the trumpets and horns. The key is E major, dominant of the A major which is prominent in the first

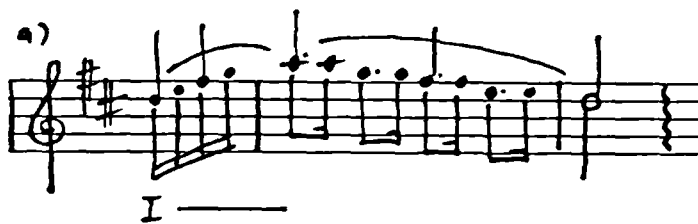
and last scenes. [Griffiths] [39]

The fanfare gestures are obvious: the music has, generically, many surface connections with earlier operatic fanfares from Monteverdi to Verdi. Like many earlier fanfares, it seems to concern itself more with the blatant repetition of a single triad, a call to attention, than with playing a tonally defining role.

By way of comparison, let us take a brief look at the toccata which heralds the start of Monteverdi's opera, Orfeo. [40] In essence, it too is a prolongation of a single triad, in this case D major, with scalar figures serving to decorate the notes of that triad. In fact, prolongation is rather overstating the case: the fanfare is merely a horizontalisation of the D triad over a D pedal (see Ex. 3-5). It does not really belong with what follows: its function is gestural and conventional, to attract the audience's attention and to frame the drama. Though what follows is also in D (minor), there is little other connection – indeed, the fanfare music was written in C, though it is generally assumed to have sounded a tone higher. [41] The opening ritornello of the Prologue defines its own tonality without reference to the toccata. Stravinsky's fanfare is, in one sense, completely different in that there is no need for it. After all, The Rake was written to be performed in post-Wagnerian theatres where the ringing of warning bells and the dimming of house lights are signal enough that the drama is about to begin. Why the need for the calls to attention when the music which begins Act I is completely different? By writing of the 'E major' of the fanfare as 'the dominant of the A major' of the Duet & Trio, Griffiths is suggesting a connection which, as in the Monteverdi, appears not to exist. There is little evidence to suggest that this E

Ex. 3-5

Monteverdi, Orfeo, Toccata



functions as a dominant preparation for A. It exists more in opposition to what follows and belongs where it does almost as a fanfare in inverted commas because that is conventionally where operatic fanfares belong. [42]

The 19-bar Prelude consists of a prolongation of an E major triad by means of melodic neighbour-note motion and arpeggiation of the triad in the bass (not a 'bass arpeggiation' in the conventional Schenkerian sense). There is no linear upper-voice descent and the dominant is only weakly represented (see Ex. 3-6b). The principal means by which 'E major' is articulated, however, is simply through the insistent, fanfare-like repetition of the triad of E major in close position.

It is possible to regard the Prologue as tonal in the sense that it demonstrates a number of tonally defining features: an essentially triadic harmony; triadic prolongation by means of horizontalisation and neighbour-note motion; and a consonant 'background' contrapuntal structure. But what justification is there for talking about prolongational structures in this music? On a general level, Joseph Straus's four conditions necessary for prolongation (see the discussion of 'The Problem of Prolongation in Post-Tonal Music' in Chapter 2) are all fulfilled:

1) there is a distinction made by the music between consonance and dissonance. Consonant triads are gesturally/rhythmically accented, not just the reiterated E major triads which take up such a large proportion of the music (bs 1-2, 11 & 18-19, or about 26% of the number), but also the B major (bs 6-7) and G# major (b. 10) triads which in a similar way articulate the beginnings and endings of phrases. Intervening harmonies are heard as dissonant and there is even a hierarchy of dissonance,

Ex. 3-6a

Stravinsky, The Rake's Progress, Prelude

Libretto by W. H. Auden
and Chester Kallman

Deutsche Übersetzung von Fritz Schröder

Music by Igor Stravinsky
1948 - 51

PRELUDE

Tempo $\text{♩} = 138$

5

A

sub. meno f

B

ff

C

CURTAIN
VORHANG

attacca

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B. & H. 17083

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Ex. 3-6b

Stravinsky, The Rake's Progress, Prelude

Handwritten musical score for Ex. 3-6b, Stravinsky's The Rake's Progress, Prelude. The score is in treble and bass staves, key of D major (three sharps). The treble staff contains a melodic line with notes G4, A4, B4, C5, and G4. The bass staff contains a harmonic line with notes D3, E3, F#3, and D3. Roman numerals I, (V), (III), and I are written below the bass staff. Fingerings are indicated by numbers 1-5 above the notes.

e.g. the first harmony in b. 3, built of 5ths [E-B-F#], is heard as less dissonant (simpler) than the predominant harmony of b. 17 [E-B-F#-A#] (more complex);

2) there is a hierarchy of consonant harmonies. Greater statistical and, by implication, structural weight is given to the E major triads than to the other triads. A sense of movement is created away from and towards E;

3) for similar reasons, the 'embellishment condition' holds. The melodic C's in bs 4 and 16, for instance, are heard as neighbour notes to the Bs which surround them, both for statistical/rhythmic reasons and because they are heard in relation to the hierarchically superior harmonies supporting the Bs; and

4) there is a clear distinction between vertical and horizontal dimensions, i.e. between harmony and voice-leading. Melodic motion is generally conjunctive, bass motion is generally disjunctive (see Ex. 3-6a).

And yet, of course, this is not a piece of eighteenth-century tonal music. Though there is a clear motion from consonance to dissonance brought about by means of voice-leading, a more detailed reading suggests that the status of the dissonances and their 'resolutions' is not as unambiguous as might at first be supposed. Take, for instance, the dissonance already referred to in b. 3. It is dissonant because it stands between two consonances. Even though the essential motion of the bass to the 5th degree and back and the inner voice from 3-2-3 implies a localised I-V-I progression (see Ex. 3-7a), the D# is 'missing' from the 'V' chord and, instead, the E from the chords which surround it remains invariant within it (see Ex. 3-7b).

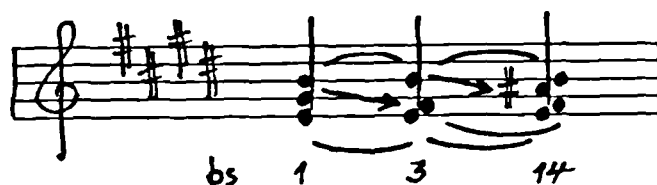
Ex. 3-7

Stravinsky, The Rake's Progress, Prelude



Ex. 3-8

Stravinsky, The Rake's Progress, Prelude



How then do we interpret this chord? Merely as a decorative dissonance which acts as some kind of foil to the consonances, so reinforcing the identity of those consonances? As a substitute dominant which, to all intents and purposes, behaves like a dominant but has a 'wrong' note thrown in to add colour? Or as a much less arbitrary harmony which plays an important referential role in the music and sets up an opposition between its apparent tonal function and its non-functional structural identity? The harmony at the start of b. 3 is actually both tonic and dominant in that it contains a superimposed pair of fifths which define tonic (E-B) and dominant (B-F#). The resulting [0,2,7] collection is an important recurring sonority throughout the Prelude: it occurs in identical form in bs 14-16 and in a different form (A-E-B) in bs 5 and 8, and from it is derived, again by voice-leading, the more dissonant [0,2,6,7] form in bs 14-17 (Ex. 3-8 shows the process of transformation from tonic triad by means of voice-leading).

Furthermore, it is this collection, it seems to me, which provides a link with the Duet & Trio which follows by making a referential connection - not, as Griffiths would have it, by the E triad functioning as the dominant of A. It is the [0,2,7] set, in various guises (i.e. as pc set 3-9 in its [0,2,7] and [0,5,7] forms), which forms the basis of the first five bars of I/I (Ex. 3-9). [43]

The only possible 'functional' connection between Prologue and I/I is in the voice-leading which links them, i.e. the way in which the [0,2,7] sonority which opens I/I emerges from the E major triads at the end of the Prologue (Ex. 3-10). Note how, in the final bar, the triad - which in its pure form has only ever occurred in the same registral position - is registrally transferred to make obvious the link. It is

Exs 3-9 & 3-10

Stravinsky, The Rake's Progress

Ex. 3-9

I/i, bs 4-5

Stravinsky, The Rake's Progress, Prologue

The musical score for "The Rose Tree" is presented in two systems. The first system consists of two staves: a vocal line (Soprano) and a piano accompaniment line. The vocal line begins with a treble clef and a key signature of one sharp (F#). The piano accompaniment line begins with a bass clef and a key signature of one sharp (F#). The second system also consists of two staves: a vocal line (Soprano) and a piano accompaniment line. The vocal line begins with a treble clef and a key signature of one sharp (F#). The piano accompaniment line begins with a bass clef and a key signature of one sharp (F#). The score includes various musical notations such as notes, rests, and dynamic markings.

also typical of a certain kind of cadential gesture in Stravinsky's neo-classical works where he over-shoots the conventional point of closure. In this case, we do not end with the root position triad in b. 18, as we might expect, but with a more thickly scored version of the chord in first inversion. Another example of such a cadential gesture can be seen below in the chorale which ends the Symphony in C.

The 3-note collection has important connections with other parts of the opera too, and these will be discussed below.

What, then, is the relationship between the detail of the voice-leading and the referential sonority in the Prologue? Ex. 3-11 is an attempt to graph the foreground detail. What is immediately apparent is that though at a middleground level (Ex. 3-6b) the structure appears to be connected, this is much less clear at the foreground. Continuity is, in fact, deliberately interrupted. The most obvious breaks come between bs 10-11 from the chord of G# back to E; and between bs 17-18 from the [0,2,6,7] chord back, again, to an E triad. It is almost as if the voice-leading is able to take the music away from the tonic (note the comparative ease with which it 'modulates' to V and then III) but is unable to return other than by rupture and insistent referential re-statement of the tonic. There are links across these breaks of common notes (G# across bs 10-11; E-B across bs 17-18) but these serve mainly to emphasise the essentially static centrality of the E-G#-B triad rather than to suggest any clearly directed motion. A sense of forward motion, however, is generated by the referential sonority in the way that it becomes progressively more dissonant, i.e. it appears to move further away from the tonic triad (a process outlined in Ex. 3-8). There is thus an interesting complementary relationship between the

voice-leading which is locally linear/directed but overall is circular/undirected, and the organisation of static harmonies which on a larger scale give a sense of forward motion.

The foreground voice-leading of the Act 1/I Duet & Trio is more difficult to account for. Ex. 3-12 attempts a middleground view, trying to indicate what is 'A majorish' about the number. This is difficult because the A major triad in root position is hardly ever stated (and then only fleetingly) and when A does occur in the bass, as Ex. 3-9 makes clear, the harmony is not triadic. The overall structure, though, outlines a symmetrical lower- and upper-neighbour note oscillation about A. The end of the Introduction (b. 11) and the final cadence are the only clearly articulated moments of closure in the entire number. The sense of A major in the first section (Anne) comes from the fact that a first inversion A chord seems simply to be prolonged, and a little Mozartian gesture (Ex. 3-13a – it first appeared, slightly more hidden, in bs 1-2 of the Introduction), almost like some classical 'objet trouvé' suggests A (at least, we recognise that such a gesture is likely to occur in A major in its classical context). Soon, however, as if to prove that this figure is a free floater, i.e. that it is not tied by any functional tonality, it combines with forms of itself to suggest, once again, the referential set (Exs 3-13b/c). The result is a more static music than ever one would expect in a tonal context.

The second section (Tom) seems more dynamic, even though it begins, more or less, as a transposition down a tone of Anne's music. Now root position G major triads do occur, and the voice-leading appears more clearly directed. The same is true of Trulove's music (in 'B'). At fig. 20 (b. 95) the music slips back to where it began at fig. 2

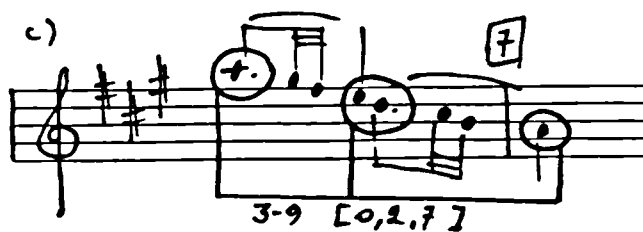
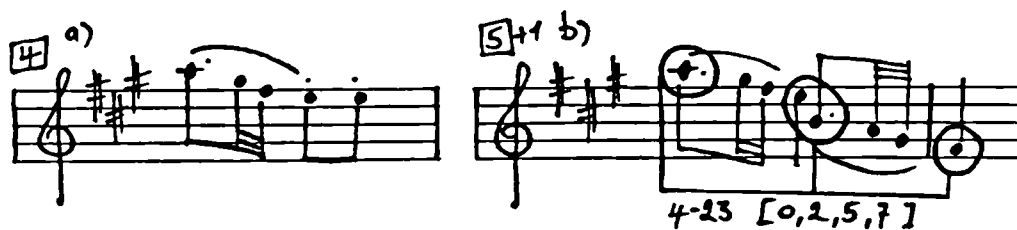
Ex. 3-12

Stravinsky, The Rake's Progress, Act I/I



Ex. 3-13

Stravinsky, The Rake's Progress, Act I/I



(b. 12) and centres itself, once again, on A.

Connections between sections are thus motivic and according to a pre-ordained symmetrical scheme. There is, furthermore, a shape to the whole, a movement from relative stasis to relative dynamism and back – away from and towards contextually defined (structural) consonance. As Ex. 3-12 proves, though voice-leading has a role to play in the number, it is not a connected tonal structure but one which balances many different, albeit interdependent, elements.

The connections Griffiths suggests in terms of key between Prologue and the first and last scenes of Act I are made referentially by means of the [0,2,7] set. Though we may wish to contest the observation that the final 'lanterloo' Chorus of I/ii is wholeheartedly 'in the key of A major once more', the explicit presence, both vertically and horizontally, of interval-classes (ics) 2 and 5 might alert us to the pervasive harmonic control of the [0,2,7] collection. More specifically, the number opens with the conjunction of the two forms of the set found alternating in the opening of the I/i Duet & Trio, namely [A-E-B] and [D-A-E], the latter vertically in fifths, the former horizontally in fourths (Ex. 3-14). Taken on its own, the melody might be heard to prolong an A major triad (Ex. 3-15) but it is not contextually supported by the harmony and is always cut short, i.e. it appears to deny its own continuity and directedness, thus reinforcing the sectionalised, non-functional nature of the harmony. Re-statements of this melody appear to be connected by a half-bar semiquaver scalar figure but it is kept distinct in terms of its scoring and, in any case, it is not clear what it is connecting. It is almost a classical scalar connecting figure in quotation marks. More importantly, it outlines a

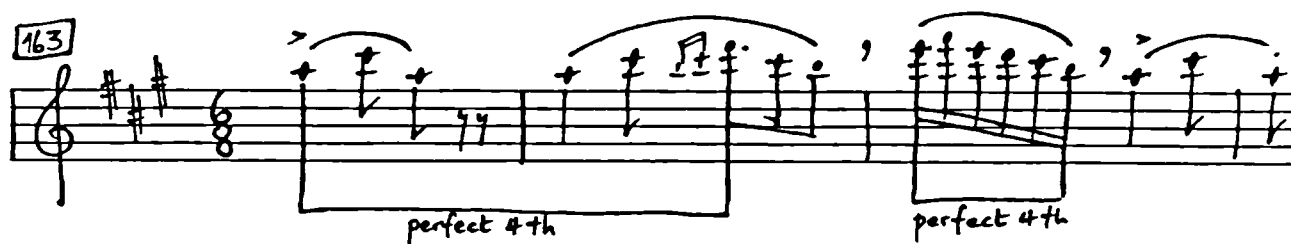
Ex. 3-14

Stravinsky, The Rake's Progress, Act I/II



Ex. 3-15

Stravinsky, The Rake's Progress, Act I/II



Stravinsky, The Rake's Progress

Handwritten musical score for two systems. The first system is labeled $I/ii, [176] + 5$ and the second $I/iii, [177]$. The notation includes various notes, rests, and dynamic markings like p and f .

descending fourth, E-B, complementing the rising melodic fourth, A-D: taken together they articulate the 4-note collection from which the vertical harmony is built [D-A-E-B] (see Ex. 3-15). Even where the music is more clearly centred on A with the entry of the chorus at fig. 164, a pedal of a major 9th (A-B) is to be heard in the accompaniment which, taken with the perfect fifth (A-E) outlined by the voices, articulates once again the [0,2,7] trichord. The centrality of this sonority is confirmed by the final cadence which, though it feigns resolution by allowing the D in the bass to move up to the A (a plagal cadence?), the [0,2,5,7] tetrachord remains (Ex. 3-16a).

This fourth/plagal relationship is to be found elsewhere in the number. On occasions the Chorus moves to unexpected (and unrelated) harmonic regions which demonstrate a tendency to define themselves 'plagally'. At fig. 168 the music appears to centre itself around B; at fig. 168+3 it is G; at fig. 169 it is C; and at fig. 169+2 it is A. The interval of a fourth is highlighted not only cadentially but also melodically (see Ex. 3-17).

These allusions to plagal cadences are complemented by allusions to other tonal patterns. For instance, taken on its own much of the choral writing displays aspects of tonal voice-leading (and so, presumably, gives rise to Griffiths's assertion that the Chorus is in A major). For example, in Ex. 3-18, A major is prolonged by traditional means of arpeggiation, neighbour note and passing note motions, and by voice exchange. Were it not for the syncopation and the undue metrical prominence given to the encircled dissonances (and, of course, the orchestral accompaniment!), this might almost be mistaken for early Schubert. But there are already too many 'were it not for's'. Even

Ex. 3-17

Stravinsky, The Rake's Progress, Act I/ii

Handwritten musical score for Ex. 3-17 from Stravinsky's *The Rake's Progress*, Act I/ii. The score is written on two staves, with the vocal line on the bottom staff and the piano accompaniment on the top staff. The key signature is one sharp (F#). The tempo/mood is marked "p. 14". The lyrics are: "B: They go a- wal-king. what do they ...". The score includes various musical notations such as notes, rests, and dynamic markings.

Ex. 3-18

Stravinsky, The Rake's Progress, Act I/II

Handwritten musical score for Ex. 3-18, Stravinsky's The Rake's Progress, Act I/II. The score is written on two staves, with the right staff containing a complex, overlapping diagram. The diagram features a large oval labeled 'N' and a smaller oval labeled 'P'. A vertical line labeled 'I' runs through the center of the diagram. The left staff contains musical notation, including a treble clef, a key signature of one sharp (F#), and a time signature of 3/4. The right staff contains musical notation, including a treble clef, a key signature of one sharp (F#), and a time signature of 3/4. The diagram is a complex, overlapping structure with various lines and curves, suggesting a musical analysis or a specific performance technique. The notation includes various notes, rests, and accidentals, with some notes marked with a '2' and a 'P'.

here, tonality is being compromised beyond the point at which tonal analytical techniques can have sole jurisdiction. The encircled chords (A-B-D) are an explicit subset of the referential 4-note collection – in this case, set 3-7 [0,2,5] and not 3-9 [0,2,7].

Sequence is another tonal phenomenon to which the music alludes. The bars on B at fig. 168 are repeated sequentially up a semitone at fig. 169; similarly the passage on G at fig. 168+3 is repeated up a tone on A at fig. 169+2. The dramatic reason for this is obvious: the pair of questions sung by the chorus are sequentially related, as is the pair of answers. Again, however, though these passages appear to function in a tonal way, this is deceptive. They give the illusion of directedness even though they are not part of a larger connective voice-leading pattern (neither prolonging nor modulatory). We are moving away from the initial idea (textual, musical) but it is not clear where we are going. Variants of the semiquaver scalar figure attempt to provide continuity but the connections they make are local, papering over the joins of otherwise discrete harmonic blocks. It is only really the motivic continuity provided by the perfect fourth which allows for a modicum of connectedness. Unity of mood is provided by the plagal feel of the music, giving a gentle, pastoral air to the Chorus:

'The sun is bright, the grass is green. Lanterloo, lanterloo'. The delicate balance/tension in this Chorus between a conventional, dynamic tonal surface – represented, for the most part, by the music the chorus itself sings – and a more static, non-tonal harmonic sub-surface which articulates a larger-scale structure by repetition and juxtaposition rather than by on-going development, is a metaphor for the semantic tension in the text between a simple, pastoral surface (which

Griffiths describes as 'a nursery-rhyme nocturne' [44]) and the enigmatic, erotic and violent undertones to many of the lines:

They go a-walking. What do they see?

An almanack in a walnut tree.

What will he do when they lie in bed? Lanterloo, lanterloo!

Draw his sword and chop off her head.

For music and text, both parts of the equation are necessary: innocence and corruption, tonality and non-tonality. It is the dynamic tension between these opposites, forcing each other in different directions, which gives the music and drama its character. What makes the music so vital is that Stravinsky is constantly playing with the ambiguities between the opposed systems: the fourths of the tonal elements might become non-functional pitch collections; the voice-leading of the non-tonal elements might at any moment suggest tonal motion.

These tensions are expressed in the final chord of the Chorus (see Ex. 3-16a) in that it suggests resolution by coming to rest and implying a cadence but it is, of course, a non-resolution in tonal terms. Tonal and non-tonal are held in dynamic tension; it is both in and not in A major. If Griffiths's description were correct then we should expect an A major triad in the final bar. We do not have one because, in the context of what we have already heard, such an ending would be nonsensical – it would dissolve the very necessary ambiguity. This is surely what Stravinsky had in mind when he talked of 'polar attraction, of the way in which poles may be brought 'together without being compelled to conform to the exigencies of tonality'. [45]

The entry of Nick Shadow 24 bars before the end of the number (fig. 171) is particularly significant in this regard. Nick's message

to Tom Rakewell, in contrast with that of the Chorus of Roaring Boys and Whores, is direct:

Sweet dreams, my master. Dreams may lie,
But dream. For when you wake, you die.

The accompaniment reiterates the material of the four-bar introduction to the Chorus, music which has almost taken on the status of a ritornello during the course of the number. Any tendency to directedness in this material (see Ex. 3-15) is undermined by its highly repetitious treatment here. The constituent elements, with occasional slight variations - rising major 3rd (a), falling minor 3rd (b) and falling semiquaver connecting figure (c) (see Ex. 3-19) are repeated cyclically as represented in Fig. 3-1. The suspicion that the connecting nature of (c) is illusory is confirmed when it occurs here as an independent motivic unit, devoid of any connecting function (see fig. 174+3+4).

Fig. 3-1

Pattern of Occurrence of Motives Between Figs. 173+3 & 175+4

a		
a	b	
a		
a	b	c
		c
	b	
a		
a	b	c
a	b	c
a		
a	b	
a	b	

Ex. 3-19

Stravinsky, The Rake's Progress, Act 1/II



Ex. 3-20

Stravinsky, The Rake's Progress, Act 1/II



In the middle of this undirected harmony, Nick's line appears to have slightly more movement in that it outlines a falling fourth from D and resting on A. It thus completes the motion implicit in Ex. 3-19b, but which is not fully realised until Nick sings the word 'die' at fig. 175+4, at which point a quasi-Phrygian version of the falling fourth, 'harmonised' in thirds, is introduced in the orchestra (Ex. 3-20). The text is, of course, the cue for the introduction of these new pitches foreign to the prevailing diatonic harmony. Both Nick's line and the Ex. 3-20 figure, though related to the accompaniment, remain independent of it: or, rather, there is no fixed relationship between them. Nick's line is able to move freely within the accompaniment; Ex. 3-20 can be inserted as a new layer, polarised by the accompaniment where it belongs (motivically) and yet does not belong (harmonically).

Arnold Whittall, in the light of Stravinsky's observations in the Poetics, has written of this problematic theoretical situation:

Instead of the hierarchically functional relationships between fundamental and ornamental factors, each element of which may be precisely defined, there is a polarity between elements which are fixed (which are emphasised and recur) and elements which are free. These 'free' elements may seem to elaborate or decorate the fixities, simply because of their contrasting rhythmic and textural presentation; but they may also seem to float around the fixities without the kind of dependence on them which can be functionally defined by the application of an appropriate and all inclusive terminology ... [46]

Such a polarity is evident in this Chorus from The Rake's Progress.

Ex. 3-16 shows how the referential [0,2,5,7] tetrachord which ends I/II connects with the instrumental prelude at the start of I/III. Though it

Ex. 3-21

Stravinsky, The Rake's Progress, Act I/III

Handwritten musical score for three staves: Ob., C.A., and Fg. The score includes various musical notations, accidentals, and handwritten annotations.

- Ob. staff:** Starts with a circled box containing "778" and "+5". The notation includes a treble clef, a key signature of one flat, and a series of notes with accidentals. A dashed line with an "N" and an arrow points to a specific note. A bracket labeled "4-23" is at the end of the staff.
- C.A. staff:** Includes a treble clef and a key signature of one flat. A circled box contains "3-9" and "[0,2,7]". A bracket labeled "N" is above a group of notes. A bracket labeled "4-23" is below a group of notes. A bracket labeled "[0,2,5,7]" is below a group of notes. A bracket labeled "N" is above a group of notes. A bracket labeled "4-23" is below a group of notes.
- Fg. staff:** Includes a bass clef and a key signature of one flat. A bracket labeled "4-23" is below a group of notes. A bracket labeled "[0,2,5,7]" is below a group of notes. A bracket labeled "N" is above a group of notes. A bracket labeled "4-23" is below a group of notes.

begins with the [0,2,5] subset of the tetrachord, all the principal cadences of this 24 bar prelude fall on to the [0,2,7] trichord in its A-E-B form, immediately preceded by its D-A-E form (bs 13, 16 & 24). The only exception is the first cadence at b. 8 which also falls on to a [0,2,7] trichord but in a new C-G-D form. Even passages which yield more readily to a voice-leading analysis can just as easily be accounted for in terms of the referential sonority – for example, the 3-bar phrase given in Ex. 3-21. The uppermost voice (oboe) displays prolongation of the E by means of neighbour-note motions on two levels, and is supported by similar upper- and lower-neighbour note motions in the lowest voice (bassoon) prolonging A (1). There is also a (coincidental?) instance of voice exchange between middle (cor anglais) and lowest voices. Yet at the same time the oboe line unfolds the [0,2,5,7] A-B-D-E collection and all verticalities except one are subsets of it. Even here, the directed and the undirected are polarised. Ex. 3-21 also exemplifies the difficulties inherent in graphing the voice-leading of such a passage. Though each of the three strands evinces more-or-less obvious techniques of prolongation, they do not coincide contrapuntally; there is a tension between the melodic strands but which is contained by the harmony (the referential tetrachord) and the implicit goal of the directed motion, even though each line achieves that goal differently. The 'failure' of the graph (in Schenkerian terms) should not, however, be seen as a failure of analysis. It helps us to see more clearly both the tensions between melody, harmony and counterpoint, and to assess what exactly it is that Stravinsky is doing with tonality.

The introduction to scene III is an obvious parody of the Introduction to scene I, reflecting the changed dramatic situation:

Ex. 3-22

Stravinsky, The Rake's Progress, Comparison of Act I/i & I/iii

The image displays two handwritten musical staves, labeled 'I/i' and 'I/iii', comparing musical material from Act I of Stravinsky's *The Rake's Progress*. Each staff consists of two systems of two staves each, with a grand staff (treble and bass clef) at the bottom. The notation is handwritten and includes various musical symbols such as notes, rests, accidentals, and dynamic markings. A small box containing the number '1' is present in the first system of the 'I/i' staff, and a box containing '179' is in the first system of the 'I/iii' staff. The two staves are separated by a vertical dashed line.

1/i (Anne): The woods are green and bird and beast at play
For all things keep this festival of May.

1/iii (Anne): No word from Tom. Has Love no voice, can Love not keep
A Maytime vow in cities? ...

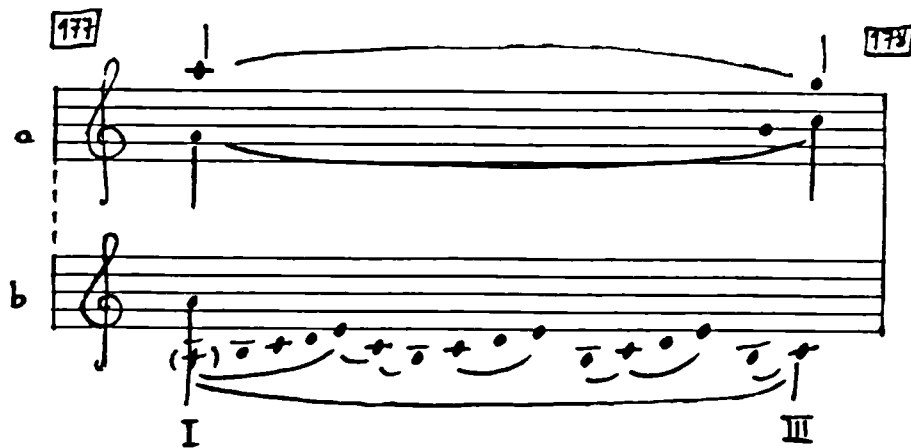
Cadential formulae recur almost exactly only now with a new key signature of A minor, not A major (Ex. 3-22).

As has been seen, defining how these keys are articulated is more problematic – especially in the case of 1/iii where cadences have been altered to make them more ambiguous. At least the music of 1/i cadences (eventually) on to A major triads, albeit in first inversion form. Ex. 3-9 notwithstanding, there is a relatively clear distinction between ‘melody’ and ‘bass’ in the 1/i introduction making it possible to identify a vague ‘A majorishness’ about the passage; this is not so with the 1/ii introduction where, for the most part, the lowest voice behaves no more like a bass than any other voice. The first 8 bars, it might be argued, express a move from the tonic (A minor) to the relative major (C) by virtue of the fact that the lowest voice begins on A and ends on C and is ‘supported’ consonantly by the uppermost voice – see Ex. 3-23a.

However, as Ex. 3-23b shows, attempts at graphing the voice-leading are confounded because it is not really possible to give priority to any one pitch. The harmony confuses the situation still further. Ex. 3-24 shows two bars of contrary motion counterpoint where voices move by step, but identifying voice-leading is futile because the voices ‘lead’ nowhere. The harmony mixes the constituent elements of different triads. The ‘bass’ in b. 3 (marked with brackets) might suggest a local V6-I motion; the harmonisation suggests quite the reverse. V contains elements of I and vice-versa. Voice exchanges can

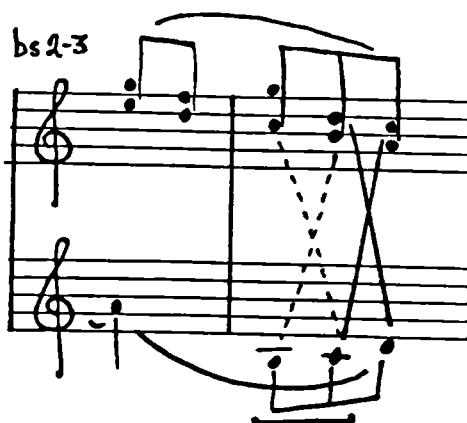
Ex. 3-23

Stravinsky, The Rake's Progress, Act I/III



Ex. 3-24

Stravinsky, The Rake's Progress, Act I/III



be identified but these too are arbitrary or coincidental, the vestiges of tonal prolongation techniques in a context where it is not clear what is being prolonged.

What then is the value of the concept of prolongation here? One answer is to repeat Derrick Puffett's response to the same question in relation to his analysis of Tippett (see Chapter 2) – 'Precious little, if it is judged by the conclusiveness of its results'. [47] What it does tell us is how far this music can be regarded as tonal. It is tonal in so far as its voice-leading directs the music to points of apparent closure (cadences) that have something to do with a tonic. Yet the question still remains, at what point are we able to decide whether or not this music is in A minor? Maybe the question is unanswerable, i.e. it is both in and not in A minor. Other features of the music such as certain classical turns of phrase or its near-regular 4-bar phrase structure might invite us to assess it more directly in relation to tonal models. However, it cannot be heard out of the context of both its own more immediate model (the introduction to 1/1) where the polarity between tonal and non-tonal is more evenly balanced, and of the music which precedes and follows it. Ultimately, though, it is the way in which the elements of continuity (demonstrated by voice-leading techniques) and the elements which disrupt that continuity are held in balance that is of greatest interest, not the consistency of the analytical techniques being employed.

Symphony in C

The Symphony in C has had, on the whole, a more extensive critical discussion than The Rake's Progress. Edward Cone's 1963 article on 'The Uses of Convention' is still of value [48], and in recent years accounts of the work by Paul Johnson, Joseph Straus and Stephen Walsh, among others, have all offered new and interesting perspectives. [49] One reason for the extensiveness of this discussion may be the traditional impression given by the work, making it easier for critics to relate it to known earlier models of symphonies and works in C. Indeed, Stravinsky himself fuelled such speculations by admitting to having on his desk copies of symphonies by Haydn and Beethoven, as well as Tchaikovsky's First Symphony, while he was writing the first two movements (composed in France in 1939). [50] The third and fourth movements are, it is claimed, more 'American' (composed in Boston and California in 1940): the composer acknowledged that certain passages might not have occurred to him before he had known the 'neon glitter of Los Angeles's boulevards from a speeding automobile' [51], and Walsh too describes the later movements as evoking 'fleetingly the scurry and glitter of celluloid America'. [52] The work was an American commission – for the fiftieth anniversary of the Chicago Symphony Orchestra – and its apparently traditional structure may well have been a result of this. As Walsh again comments, 'of all Stravinsky's 1930s scores it is the one which most obviously fits into a conventional celebration within the institutional life of a conservative culture'. [53]

This raises a number of interesting questions. Was Stravinsky being restricted in what he could write by the conservative tastes of an

American audience? If this was the case, then it would seem that 'market forces' were as restrictive on composers' activities in America as socialist realism was on composers' work in the Soviet Union. Both Stravinsky and Shostakovich were writing symphonies which, on the surface, conformed to general expectations of what a good, accessible (both contested terms) symphonic work should be, i.e. something with conservative and recognisable formal outlines and an essentially triadic basis to the musical language. Yet beneath the surface things were very different and it is the symphonic manner, or otherwise, in which such issues as key structure and thematic development are dealt with that clearly differentiates the intentions and methods of both these composers.

When Walsh refers to the Symphony fitting 'within the institutional life of a conservative culture', he is invoking the context of American concert audiences and management, but a further aspect of that conservative culture may well be that of the academy. Another reason why the work has been so widely and well received critically may be that it is eminently analysable – it 'fits' into a conservative theoretical tradition. Analytical techniques – of form, at least – appropriate to eighteenth- and nineteenth-century symphonic music appear to work equally well for the Symphony in C. For example, Eric Walter White provides us with a Toveyesque 'analytical note' which examines the motivic organisation of the work in terms of the B-C-G motto with which it opens [54]; Roman Vlad, too, highlights this motif's contribution towards ensuring 'the substantial unity of the work' [55]; and Francis Routh asserts that 'the first two movements are comparatively orthodox in structure and tonality'. [56] The culture

gave its approval to the work because it represented a 'conventional celebration' of tonal coherence and thematic unity.

The composer, however, expressed dissatisfaction with such responses:

critics (who must earn their livelihood) will find a great deal of nothing to say – factitious comparisons to other music, profound observations on the diatonicism and the use of fugato, on the existence of a suite-of-dances in the third movement, on flirtations with ballet everywhere. But anyone who had failed to notice as much would require a very different sort of commentary ... [57]

These comments are not far removed from Hans Keller's familiar diatribes against critics, and against description masquerading as analysis. [58]

In contrast to White, Vlad and Routh, the writers referred to earlier (notes 48 & 49) have challenged the ability of conventional theory to account fully for the structure of the Symphony in C. For them, and still for us today (as I shall argue in my analyses below), the work itself challenges tradition in two principal respects: first, the ways in which the Symphony is a symphony; and second, if it is in C, the kind of C it is in. One early commentator on these issues was the conductor, Ernest Ansermet, who took a negatively critical view of Stravinsky's achievement. Eric Walter White quotes Ansermet at length on the 'dialectic of symphonic form': 'the Allegro of the Symphony in C is no more than the portrait of a symphonic allegro', judges Ansermet, because, in White's words, 'its form is static and its motives fail to grow in meaning'. [59] Ansermet has identified a crucial structural feature of the first movement but implicitly to condemn the work for not being a Beethoven symphony is a miscalculation. As with The Rake's

Progress, Stravinsky is taking material from classical models but placing it in new contexts, working with it in different ways. It is not a poorly executed exercise in pastiche. Walsh cites a similar argument from a contemporary British symphonist: '[It's motivicism] guarantees unity, but it perhaps does not guarantee that cogency of argument without which, according to Robert Simpson, a symphony cannot properly be so called'. [60]

Joseph Straus, in his chapter on sonata forms, like Charles Rosen before him, distinguishes between eighteenth- and nineteenth-century forms of sonata structure. Twentieth-century composers who have adopted a nineteenth-century outlook, he argues, have written uninteresting sonatas because 'the sonata form floats upon the musical surface, a mere arrangement of themes lacking in real connection to the harmonic structure beneath'. Certain twentieth-century sonata movements, however, and the first movement of the Symphony in C is one such, have grappled structurally with the eighteenth-century concept 'where the thematic organisation deeply implicates the underlying harmonic organisation'. [61] This might suggest an unwelcome retreat to a nineteenth-century organicist view; as pointed out above, the covert synthesising tendency in Straus's work is a matter for concern (and his 'cherished' reverence towards a strictly Schenkerian understanding of prolongation, discussed in Chapter 2, betrays a more orthodox approach to analysis than the radical agenda of Remaking the Past implies). Though Straus acknowledges that, in the twentieth century, a nineteenth-century notion of organicism is no longer possible, he nevertheless insists that '[e]ven in the strongest and most interesting twentieth-century sonatas, the fit between the form and the deeper levels of

harmonic structure is never seamless'. [62] I do find this assertion faintly ridiculous, just as Stravinsky was amused by critics who made 'factitious comparisons to other music'. Straus is telling us that this work is not a symphony by Haydn or Beethoven, and there is the danger that he could fall into the same trap as Heinrich Schenker [63], who sought a diatonic background model for Stravinsky's Piano Concerto only to conclude that Stravinsky constantly contradicted it and thus that Stravinsky's music was not very good. [64] This, fortunately, is not the conclusion Straus draws. His analysis discusses the various polarities of the music in a positive way, and the language of 'undercutting' and 'undermining' tonal structures in his prefatory remarks is not borne out by the conclusion that 'Stravinsky's tonal polarity is powerful enough to endow the traditional form with new meaning'. [65] Throughout his book, Straus's actual analyses are more convincing than the scepticism embodied in his theoretical discussions. The Oedipal anxiety of influence would appear to operate more strongly on Straus (the inescapable dominance of the Schenkerian father figure) than it does on Stravinsky who is able to use, adapt or reject the music of his forebears freely and creatively.

The tradition of discussing Stravinsky's music in terms of pitch-class collections, initiated by Arthur Berger and continued, in different ways by Allen Forte and Pieter van den Toorn [66], is followed by Paul Johnson in his examination of the Symphony in C. [67] Johnson's thesis is that deep level harmonic consistency exists in much of Stravinsky's music due to the presence of two collections: the octatonic and what he calls the 8-note diatonic [0,1,2,3,5,7,8,10] collections. In the case of the use of the latter, major third relationships tend to

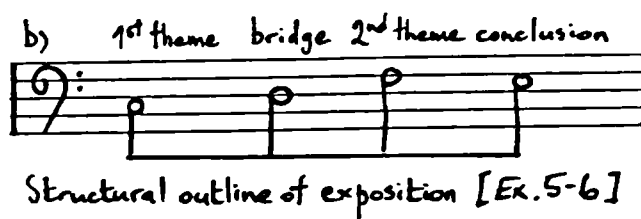
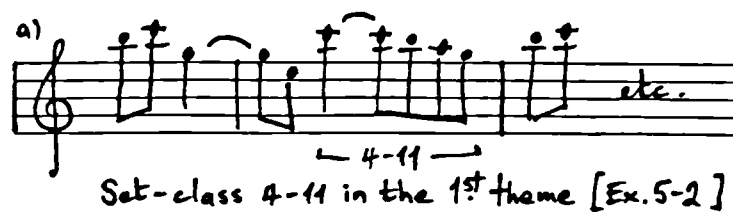
predominate and often the referential sonority (or 'tonic') that characterises these works is an [0,4,7,11] tetrachord, e.g. C-E-G-B, 'delineating a polarity between triads a major third apart'. [68] The polarity between C and E is, of course, fundamental to the first movement of the Symphony. Most interesting about Johnson's essay, though, is his attempt to show how the [0,4,7,11] tetrachord on C is prolonged linearly. Straus, too, has discussed the possibilities of the large-scale prolongation of pc sets that occur frequently on the surface of the music [69], and in the case of the Symphony in C it is, he argues, the unfolding of pc set 4-11 that governs the structure of the exposition while at the same time preserving the 'balance' between C and E - or, rather, a move from the dominance of one to the other (see Ex. 3-25). [70]

As was seen in Chapter 2, the question of the prolongation of a referential sonority is both an attractive and a problematic one. The attraction is that it is a convenient way of getting to grips with obvious aspects of linearity in the music. The principal problems (certainly in Straus's work) are twofold. The first is a technical issue of what might loosely be termed segmentation, i.e. the basis on which selection is made of the referential sonority that is to be prolonged. Are there any rules governing its size, e.g. are 3-note or 9-note sonorities equally viable or is there some unstated preference for 4-note formations? Is statistical frequency of occurrence the preferred rule of selection? How are we expected to decide and/or mediate between two equally likely readings (such as Johnson's prolongation of 4-26 and Straus's prolongation of 4-11)?

The second problem is one that has already been raised in relation

Ex. 3-25

Joseph Straus, Unfolding of pc set 4-11 in Stravinsky, Symphony in C, I



Ex. 3-26

Stravinsky, Symphony in C, I



to Straus's work and that is to do with the synthesising tendency of such prolongational readings. As was seen in the discussions of sections of The Rake's Progress above, there is always a substantive tension, an opposition between harmony and voice-leading in Stravinsky. When a motivic element becomes the basis for middleground structural (i.e. harmonic) motion, that opposition is minimised: it is almost as if the referential sonority becomes a substitute for the triad – certainly an implicit assumption in Johnson's work. How does the balance between C and E that is thus demonstrated differ from the balancing of tonic and dominant in classical music? The 'fit between form and the deeper levels of harmonic structure' here may not be 'seamless', but then, neither is this always the case even in classical sonata forms.

One further difficulty with Straus's analysis is its perspective. We might assume, because of the thrust of his theoretical discussion, that his intention is essentially poietic, i.e. he is trying to tell us something about the way in which the music was composed and, maybe, the 'anxious' state of mind of the composer. This is brought to our attention by statements such as:

The first movement of the Symphony in C is Stravinsky's most profound attempt to grapple with the sonata form; and

Although the traditional formal outline remains intact in the Symphony in C, beneath it Stravinsky explores new musical imperatives. [71]

And yet the analytical techniques Straus employs would seem, at times, to show more concern for the way in which the musical structure is perceived. The model (though never explicitly invoked) is less likely to be Schenker than the psychologically based implication-realisation

principle of Meyer/ Narmour. 'The C-centred area implies E', he writes; 'the rest of the exposition serves to realise that implication'. [72] A small alteration to Ex. 3-25b (his Ex. 5-6) makes this clear (Ex. 3-26).

The psychological foundations for this are flimsy. Because 4-11 is not given a privileged role over other pc collections on the surface of the music, it would be unlikely that even an expert listener could predict the highly abstract kind of pattern completion proposed by Straus, particularly over large time spans. And in any case the model provided by Ex. 3-25b/26 is hardly explicit in the music. For instance, though it may be true to say that the first theme revolves about C, that C is virtually never present in the bass of the music, making the pattern even harder to discern.

All this is to say that, though both Straus and Johnson acknowledge the significance of polarities in the music, the urge to synthesise remains a strong force in the working out of their ideas (even if its achievement is frustrated) and this, to my mind, undermines the central status of opposition and discontinuity in Stravinsky's music.

Before we pass on to a more detailed examination of selected sections of the Symphony in C, we should here reconsider Cone's groundbreaking article, 'Stravinsky: The Progress of a Method', discussed above. [73] The techniques of stratification, interlock and synthesis which he identifies in the Symphonies of Wind Instruments are the means by which the various fragmentary musical ideas are organised over the large span of the music, and are made to balance or cohere. Most importantly, the initial stratification of musical ideas is not contradicted by the music's movement towards a specific goal.

As with the Symphonies of Wind Instruments, the ultimate goal of the Symphony in C is a chorale which appears to play a role both of closure and of resolution. Gesturally this is certainly so as its homophonic calm brings the work to rest in a manner in common with the slow coda-like passages to be found at the end of many works from Les Noces to the closing 'Alleluia. Laudate Dominum' of the Symphony of Psalms. Furthermore, it comes to rest on C, recalling the first movement. Does it, then, resolve the harmonic ambiguities presented in the work?

Certainly in terms of the final movement there are senses in which it might be heard as a resolution.

The 14-bar largo which begins the movement serves to 'prolong' an important referential sonority. In an abstract sense, this could be seen to be a prolongation of the all-interval tetrachord: an invariant 3-note set, F-G-B (3-8), played vertically by trombones and doubled by horns, punctuates the horizontal motion of the bassoon lines by combining with it to generate the two different forms of the all-interval tetrachord, namely E-F-G-B (4-Z29) and F-G-Bb-B (4-Z15) (Ex. 3-27a). The invariant trichord is an insistent feature of these bars, but it also appears to be prolonged by the neighbour-note motions of Horn 1 (supported in parallel motion by the other two horns) (Ex. 3-27b). The bassoon lines are typical of a certain kind of circular melodic writing in Stravinsky [74]: each line is contained within a fairly narrow intervallic range and keeps revolving round the same limited pitches. In this case, bassoon 2 is contained within a fifth [Bb-C-D-E-F] and bassoon 1 is contained within an octave [D-E-F-G-A-B-D]. Taken together they form another instance of Johnson's [0,1,2,3,5,7,8,10] '8-note diatonic' collection, and the pitch-classes

Ex. 3-27

Stravinsky, Symphony in C, IV

a) $\text{IV}, \text{bs } 1-14$

b)

$\uparrow [F,G,B][0,2,6](3-8)$

$\uparrow N$

$\uparrow N$

$4-z15$ $4-z29$

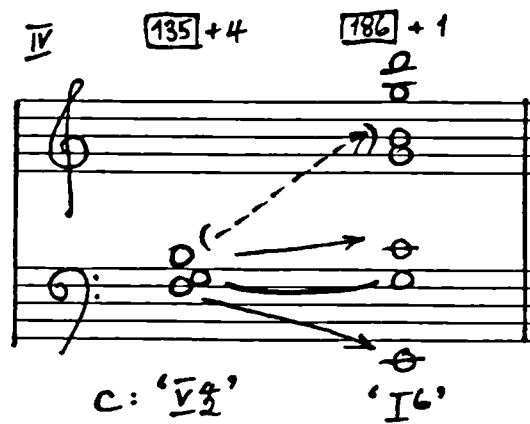
of the forms of 4-Z29 and 4-Z15 which occur here are also taken from the same collection. The lack of linear direction to the melody, the relative harmonic stability of the verticalities which support it and the unchanging harmonic context of the whole, all contribute to the overall static effect of this passage.

Yet there is a strange sense of forward motion to these bars, even if their direction is not strongly expressed. This might be partly due to the listener's expectations (based on classical precedents) of the function of a slow introduction to an allegro finale. But the rising, upbeat character to the bassoon 1 melody implies a later structural downbeat and the prominence, as established in the first movement, of the 'leading note' B, even out of the immediate context of anything that might resemble C, also suggests upward resolution on to that C. This sense is compounded by the invariant F-G-B trichord which might be heard as final inversion dominant seventh of C suggesting resolution on to a tonic first inversion chord. In one way, that resolution is provided by the final sonority of the entire piece which is a kind of enriched 6-chord of C and which, perhaps rather unexpectedly, follows what 'should' have been the final chord rooted on C (Ex. 3-28). In another way, though, that resolution does not take place because the leading note both rises and is contained in the final sonority. Stravinsky alludes to aspects of tonal voice-leading in order to give the impression of forward motion and continuity and yet this is balanced by a harmony that remains static and discontinuous.

The main body of the movement (fig. 138) begins with the same 4-Z29 sonority, rescored, which ends the slow introduction but otherwise contrasts strongly with it: it is fast, loud, staccato and has a new

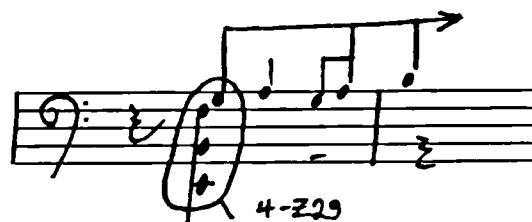
Ex. 3-28

Stravinsky, Symphony in C, IV



Ex. 3-29

Stravinsky, Symphony in C, IV



Ex. 3-30

Stravinsky, Symphony in C, IV



linear idea which seems to have a clearer sense of direction (Ex. 3-29). Nevertheless, though more fragmentary (the line is constantly being broken off), this linear material is similar to the preceding bassoon 1 line in that it consists of diatonic scale segments which nearly always move upwards and which seem to be leading towards a goal. The line gradually ascends through an octave from fig. 138 to 140+4 (outlined in Ex. 3-30) and then the process is repeated, in an altered form, to lead to a varied reprise of the first subject of the first movement at fig. 143, the local goal of the ascending lines and the first strong downbeat of the movement (until this point, most phrases have begun on weak parts of the bar, confirming the upbeat status of the opening music). Figs. 138-43 thus continue what was begun in the slow introduction: both prolonging an essentially static harmonic configuration and yet, paradoxically, implying through its 'dominant-like' qualities a kind of forward motion.

It is interesting to note how the G is weakly represented here, always occurring off the beat; the leading note B, and later the leading note of the dominant, F#, are given far greater melodic and metric prominence. For instance, the arrival at the high G in the scalar passage between figs. 142-3 is twice delayed. On three occasions, the F# appears to be the goal of the upward motion and only after its third appearance does F# rise to G but with a diminuendo, off-beat and unaccented. Like the B in the opening motif of the first movement, it does 'resolve' but is so emphasised as to undermine the significance of that resolution.

As an aside, it is amusing at this point to play the model spotting game and I hazard the suggestion, following on from Walsh's

comparison of the first subjects of the Symphony in C and Beethoven's C Major Symphony [75], that the finale of Beethoven's work also lies behind the opening of the Symphony's finale. Just as Stravinsky's hesitant G-scale figures reach forward to the eventual appearance of the main theme, so the Adagio introduction to the Beethoven finale consists of an initially fragmentary and gradually expanding G-scale figure which humorously forms an anacrusis to the arrival of the principal theme at the allegro molto e vivace. Such 'factitious comparisons to other music' are, as Stravinsky would have it, obvious; more importantly, the spirit and function of this passage in Stravinsky's work are quite different. It is no longer funny: fragmentation is now heard as an essential of the musical language rather than a disruption of something more continuous and the arrival of the main theme is not intended to be decisive. As in the first movement, root position C major triads are noticeably absent (note the elaborated 6-chord again at fig. 143, a temporary resolution, perhaps, of the implied 4/2 chord which has been present from the start?) and the harmony of the next section of music from figs. 143-5 is almost as static as that which precedes it. The circular melody and the diatonically saturated harmony lead nowhere: the music simply cuts off at fig. 145 and a new section begins over a relentless 'dominant' pedal. [76]

There are other aspects of this movement which suggest parallels with larger-scale tonal connecting processes such as the return of the opening largo material at fig. 162 to 'reactivate' the all-interval tetrachord and the leading note B; the restatement of the 'dominant' motif from fig. 138 in the 'tonic' at fig. 173; and the long 'dominant' preparation for the final chorale between figs. 174-81 - not to mention

the movement's rigorous thematic working. 'Tonics' and 'dominants' exist here insofar as smaller-scale voice-leading suggests motion from one to the other; but even these occur in the context of elements which do not belong in tonal terms (e.g. the 'dominant seventh' in the two bars immediately preceding the chorale contains both F and F#). As in so much of Stravinsky's neo-classical music, such connections merely serve to disguise more fundamental oppositions; the form of the movement is defined not by its voice-leading but by the juxtaposition of blocks of clearly differentiated material. Often, this material consists of 'found' musical objects, musical devices from the tonal era in quotation marks, which locally might again behave in a functional manner but which operate within the context of a new, non-functional whole. In the case of this movement, the material has been 'found' in the first movement and is here re-worked, re-ordered, and juxtaposed in new ways. There is no need to list all the cross-movement connections but the more obvious links are:

<u>1st movement</u>	<u>4th movement</u>
'1st subject' fig. 5	theme fig. 143
'bridge theme' fig. 13	fig. 146 (VI/flute)
'2nd subject' fig. 21	fig. 148 (oboe)
'cadence' (tpt) fig. 22	'cadence' (cl) fig. 150
fig. 39+3 - fig. 44	fig. 163 - fig. 169

The most pervasive link is, of course, the three-note B-C-G motif which forms the final chorale melody and, as one might expect, its treatment encapsulates the processes elsewhere in the work. Ex. 3-31 shows the counterpoint between the outer voices of the chorale. The closure of the music is signalled when the lower voice comes to rest on the low C

Ex. 3-31

Stravinsky, Symphony in C, IV, Final Chorale

The musical score is presented on two systems of staves. The left system consists of a single staff with a treble clef and a key signature of one flat. It contains a series of notes, some of which are grouped by vertical lines, and includes a dotted rhythm. The right system consists of a single staff with a bass clef and a key signature of one flat. It also contains a series of notes, some grouped by vertical lines, and includes a dotted rhythm. The score is characterized by Stravinsky's signature style of using vertical lines to group notes, creating a complex rhythmic pattern. The notation includes various note values, including eighth and sixteenth notes, and rests. The overall structure of the score is a single melodic line, likely for a woodwind or string instrument.

and the upper voice halts on the high D without falling back on to the G as it has done in every other phrase. There is a definite sense of directedness towards the conclusion even though, as Ex. 3-31 amply illustrates, this is not brought about by conventional tonal voice leading: indeed the graph is almost a parody of what one should expect showing 'dissonant' counterpoint and a melodic ascent. Yet I feel it is possible to argue that this passage almost defines its own contrapuntal rules whereby the initial sonority, bounded by E and B, is manifestly prolonged until the final lower voice descent and upper voice ascent (Ex. 3-31ii). This contrary motion also implies a certain symmetry. Though the reasons for closure are as much gestural as contrapuntal, nevertheless the music's individual voice-leading helps to define (albeit vaguely) a sense of direction towards an important cadence. The fact that this cadence, however, is not quite the end of the piece, confirms that such directedness is only one aspect of the music. The harmony, as elsewhere, is much more static (diatonic in this case) and does not support the movement of the outer voices. Continuity and discontinuity are held in balance. The very last chord is wholly appropriate because it does not attempt to resolve the work's ambiguities but rather suspends the music's principal 'tonal' centres (C major, G major, E minor) in one sonority: though it may be a 'synthesis' (in the sense of a coming together) it is not a resolution, more a bringing to rest.

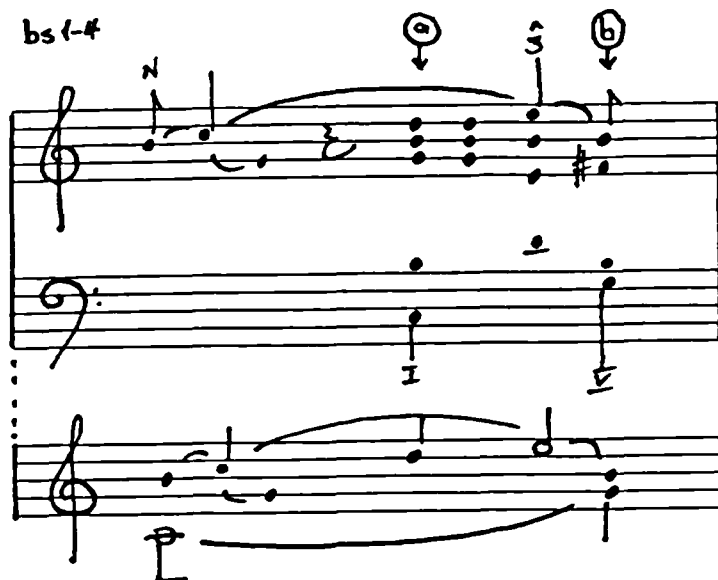
The first movement acts as a model for the fourth not just in terms of thematic material but structurally too – it is almost as if the finale is a compressed shadow of the opening. Two clear illustrations of this

occur at the beginnings and ends of the movements. Like the finale, the first movement begins with an introductory section (25 bars) which has an upbeat character leading towards the arrival of the apparently more stable first subject. The introduction presents the basic B-C-G cell and, as Cone points out [77], establishes the prominence and autonomy of the note B displaying its reluctance to behave as the leading note to C as one might expect. Nevertheless, within the context of 'sort-of-C-major' (see, for example, Ex. 3-32) the B implies the possibility of voices leading upwards towards the tonic and so, just as in the finale, imbues the music with a tentative sense of conventional forward motion. This is supported by the ascending scalar figures throughout this passage. The harmony, however, tends to contradict the (implied) voice-leading and is much more static. The first instance of this can be seen in Ex. 3-32. Though the chords marked a and b are ostensibly (by virtue of the bass) tonic and dominant, each also contains its own leading note (indeed, chord a seems to contain both tonic and dominant harmonies); furthermore, the note B remains invariant and is the only note to be doubled throughout bars 3 & 4, so undermining the directed tendencies suggested by Ex. 3-32ii. Once more the tonal and non-tonal, the functional and non-functional, are held in dynamic tension.

The first theme (fig. 5) is preceded by a bar of 'dominant' just like the 'dominant' bars before the final chorale (cf. fig. 180+2+3) containing the F of the dominant 7th which falls to the E and the F# which rises to the dominant note. Again, as with both the chorale entry at fig. 181 and the reprise of the first subject at fig. 143 in the finale, the 'definitive' thematic entry in the first movement takes place not over the expected tonic note in the bass, but over the note E.

Ex. 3-32

Stravinsky, Symphony in C, I



Ex. 3-33

Stravinsky, Symphony in C, I



The first subject embodies the tension or polarity which Cone identified as lying at the centre of the movement, namely 'the tendency of B to act as a dominant [of E minor] rather than as a leading-tone' [78]. For the purposes of this discussion what is of interest here is the way in which the oboe melody evinces a certain forward moving tendency 'in C' ('progression'), elaborating a C major triad (Ex. 3-33), while the accompaniment remains 'static' ('succession'), reiterating an E-G dyad. In fact, the melody is less obviously directed than at first seems to be the case – the prolonged C does not actually lead anywhere and the melodic elaborations are decidedly circular – but there is at least a suggestion of motion which is entirely lacking from the supporting harmony.

The end of the movement operates in a similar way to the end of the final chorale which, as discussed above, cadences on C before moving away to a different sonority rooted on E. The first movement too appears to cadence definitively on C just before its conclusion ('cellos and bassoon 2 move down to the low C at fig. 71+2) but this is subverted both by the insistent presence of the E-G dyad from fig. 68+3 and by the marked cadential gestures in the last 5 bars which reassert the E-G dyad in the bass (despite the attempt by the timpani to impose a cadence in C! – another typically classical gesture in quotation marks, devoid of its original function). Just as the final chord of the entire work freezes the opposed tonic and dominant of the finale into one gesture, so here the final chord contains the two opposed centres of the first movement, C major and E minor. Both cadential chords (Ex. 3-34) contain the note B; the B simultaneously leads to the C and remains unresolved. The movement's polarity of 'directedness' and 'stasis' ('progression'//

'succession') is expressed in these two chords.

Many commentators on the Symphony in C have attempted to account for its continuity e.g. in terms of its motivic unity (White, Vlad), or by looking for substitutes for the tonic-dominant opposition which might articulate its sonata structure (Cone, Straus [79]) – perhaps in an attempt to discover in what ways the Symphony is symphonic. Others have considered Stravinsky's work as a negation of fundamental symphonic principles (where 'internal activity is fluid, organic; action is the dominant factor, through and through') [80]:

Within their own circumscribed terms they [Stravinsky's symphonies] are highly organised, but the motion of symphony is absent. They are exclusively concerned with rhythm and texture rooted in primitive monolithic tonality; when one (or a combination) of these has transiently performed enough of its function, it is replaced, and the total effect, however internally agitated, is as static as a stage upon which dancers are gyrating. [81]

An examination of the first movement's voice-leading inevitably highlights aspects of the music's continuity. However, although, as I have shown, voice-leading operates locally to generate a sense of directedness, the kinds of large-scale connections made by writers such as Cone and Straus tend to undermine the movement's significant structural discontinuity. Certainly, when Cone uses a term like 'bridge passage' we need to question whether the demonstration of such quasi-tonal connectedness is actually pertinent. Take, for instance, the four-bar passage around fig. 8 which connects the statements of the first subject 'in C' and 'in D minor' (Ex. 3-35). This does not actually bring about a local modulation. Though the descending lines might smooth over the edges separating the two harmonic areas, the two

Ex. 3-34

Stravinsky, Symphony in C, I



Ex. 3-35

Stravinsky, Symphony in C, I, fig. 8



statements are essentially juxtaposed without any mediation. Gesturally the passage behaves like some kind of transition, but harmonically and contrapuntally it is a red herring. The same would appear to be true for the larger context here (figs. 5 to 11+3) which implies a longer-term prolongation of C by outlining a I-II-V-I motion:

C:	I	fig. 5
d:	II	fig. 8+2
G:	V	fig. 9+3
C:	I	fig. 10+2

This imitates a tonal procedure but a closer examination would seem to suggest that each of these harmonic areas is discrete and only referentially rather than functionally connected.

Another 'non-connection' can be heard even more clearly at the end of the so-called bridge passage (fig. 18+3) which concludes a long build up over a D pedal ('dominant of the dominant') with a first inversion A chord ('dominant of the dominant of the dominant'). The second theme begins at fig. 19 'In F'. The rupture is extreme, and though the Tchaikovsky-like scalar figure in flute and clarinet forges a surface link, this by no means mitigates the structural opposition between the two blocks. If this is a bridge, it has been built over the wrong part of the river.

The answer to the question of what kind of C the Symphony in C is in, is a complex one. There are undoubtedly aspects of the music which suggest C major and these can be demonstrated to an extent by the use of voice-leading techniques. There are also many surface gestures and connecting motions that are reminiscent of tonal practice and give the music a sense of directedness. However, this is only one part of the music and

should not be considered hierarchically superior to those other aspects of the music which contradict it. Harmony and voice-leading do not support one another as one would expect in an integrated tonal structure – often they directly oppose one another. The surface of the music suggests a traditional formal, tonal and thematic argument; at a deeper level this traditional structure is constantly being confronted and those elements of the music which are in, or at least on, C are held in dynamic tension with those elements of the music which are not in or on C. The rigour of its motivic and thematic working ensures a degree of coherence but the underlying strata, some of which operate linearly (melody), some of which continuously turn back on themselves (harmony), remain unresolved to the very end of the work.

*

These two case studies in Stravinsky's neo-classicism illustrate how this music is concerned with articulating an opposition or oppositions between aspects of structural continuity and discontinuity and the meaningful ways in which such oppositions can be contained. This is a fundamental issue that has confronted very many twentieth-century composers. As will be explored at greater length in Part III below, the music of Harrison Birtwistle bears striking similarities to that of Stravinsky, as well as to that of Varèse and other early modern figures, and so an understanding of the processes and structures of the work of these composers may reveal insights or suggest analytical avenues that are relevant to the music of the more recent composer. Stravinsky, Debussy and Varèse offer distinct, if different, interpretations of the

issues raised by the aesthetics of early-twentieth century modernism and, thus, before Birtwistle's music can be examined in detail the question of the nature of his own, more recent musical modernism must also be addressed if the analytical methods so far discussed are to be of pertinence.

NOTES

- 1 Reference is made on a number of occasions in the analyses below to the parallels between structural features in Birtwistle's music and the Symphonies of Wind Instruments (see, in particular, Chapter 7). Michael Hall has described Verses for Ensembles as 'a latter-day Rite of Spring' [Harrison Birtwistle, p. 52] while Nicholas Kenyon dubbed Earth Dances 'a desolate, disturbing Rite of Spring for this decade' ['The Eighties' Rite of Spring', Observer, 16 March 1986] – the similarity of its title to the 'Danse de la terre' from The Rite is not, I suspect, purely coincidental. Carmen Archadiae Mechanicae Perpetuum is, for Meirion Bowen, 'rather like the Rite of Spring in miniature' ['Knussen/London Sinfonietta', The Guardian, 23 July 1987]. Hall has also referred to the fact that Birtwistle subjected Agon 'to the most detailed analysis he has ever undertaken and echoes of it still reverberate in his music' [loc. cit., p. 17]
- 2 Edward T. Cone, 'Stravinsky: The Progress of a Method', PNM, Vol. 1, No. 1, 1962, pp. 18–26
- 3 Stratification in Birtwistle's music is discussed in general terms in Chapter 4 (see p. 207) and specifically in relation to Carmen Archadiae Mechanicae Perpetuum in Chapter 7 (see pp. 300–3)
- 4 This stratification is at its most obvious in works such as Debussy's Jeux, Varèse's Octandre, Messiaen's Chronochromie and Tippett's Piano Sonata No. 2
- 5 Cone, *ibid.*, p. 19
- 6 See Allen Forte, The Harmonic Organization of 'The Rite of Spring' (New Haven: Yale University Press, 1978). The degree to which 'synthesis' overcomes 'opposition' in this work is, I feel, overstated by Forte – as Dunsby and Whittall have commented, in relation to Forte's analyses of Schoenberg and Webern, it is 'perfectly possible for an atonal composition to lack such [nexus set] "connections" altogether – indicating, perhaps, that the composer has a less integrated sense of atonal structure than Forte and other theorists have since identified in some music' [Music Analysis in Theory and Practice (London: Faber Music,

1988), p. 146]

- 7 For a detailed discussion of 'stratification' in Jeux, see Herbert Eimert, 'Debussys "Jeux"', Die Reihe, No. 5 (Vienna: Universal Edition, 1959)
- 8 Richard S. Parks, 'Pitch Organization In Debussy: Unordered Sets in "Brouillards"', Music Theory Spectrum, Vol. 2, 1980, pp. 119-34
- 9 Dieter Schnebel, '... Brouillards. Tendenzen bei Debussy', Die Reihe, No. 6 (Vienna: Universal Edition, 1960), pp. 30-5 [tr. as 'Brouillards - Tendencies in Debussy' (Bryn Mawr: Theodor Presser, 1964)]
- 10 'The Liberation of Sound' in Schwarz and Childs, eds., Contemporary Composers on Contemporary Music, p. 197 - see Chapter 1, note 24
- 11 Perhaps the most interesting unpublished study is David Harold Cox's Birmingham University Ph.D. dissertation
- 12 Jonathan Bernard, The Music of Edgard Varèse (New Haven: Yale University Press, 1987)
- 13 Robert Danes, 'Stravinsky's The Rake's Progress: Paradigm of Neoclassic Opera' (Ph.D. Diss. [musicology]: Washington University, 1972), p. 21
- 14 *Ibid.*, p. 30
- 15 *Ibid.*
- 16 Though The Rake's Progress failed to gain widespread recognition after its first performances for the very reason that it was perceived as pastiche. As late as 1962, Deryck Cooke berated Stravinsky's Mozartian gestures because they did not behave in an authentic eighteenth-century manner - as Brian Trowell has commented, 'as if Stravinsky were composing for the ear of the Emperor Joseph II'! See 'The New and the Classical in "The Rake's Progress"', in Nicholas John, series ed., Stravinsky: The Rake's Progress/Oedipus Rex [ENO Opera Guide No. 43] (London: John Calder, 1991), p. 60. Even today, some distinguished critics still find it difficult to understand what Stravinsky was getting at: 'I then [1953] thought the work a slight but agreeable pastiche of 18th- and early 19th-century operatic conventions which could have proved hugely entertaining had the Auden-Kailman

libretto been a little more high-spirited and Stravinsky's somewhat dessicated score more individual... Renewing acquaintance with the work now has confirmed me in my view that both music and libretto are dramatically limp' – Charles Osborne, Opera, Vol. 43, No. 8, August 1992, p. 928

- 17 In a different way, one recent writer on Stravinsky has described such oppositions as the essence of the composer's work:
This, I think, is what Stravinsky's music is 'about': the deep equivalence of the natural and the artificial. At the centre of his dramatic imagination is the desire to juxtapose in a single work two competing systems – one which seems natural, tasteful, approved alike by man and God, the other of which seems artificial, abhorrent, devilish – and to subvert these distinctions as best he can. (Daniel Albright, Stravinsky: The Music Box and the Nightingale (New York: Gordon & Breach, 1989), p. 4)
For 'natural' and 'artificial', it is possible to substitute 'past' and 'present', 'tonal' and 'atonal', or many of the other opposed concepts found in Stravinsky's music.
- 18 Igor Stravinsky, Poetics of Music in the Form of Six Lessons, tr. Arthur Knodel and Ingolf Dahl (Cambridge, Mass.: Harvard University Press, 1975), p. 41. Six lectures delivered in French in 1939–40 as the Charles Eliot Norton Lectures on Poetry at Harvard University. Published in French in 1942 and in English translation in 1947.
- 19 Ibid., p. 36
- 20 Ibid., p. 37
- 21 Ibid., p. 38
- 22 Paul Griffiths, Igor Stravinsky: The Rake's Progress [Cambridge Opera Handbooks] (Cambridge: CUP, 1982), pp. 31, 34 & 35
- 23 Menachem Zur, 'Tonal Ambiguities as a Constructive Force in the Language of Stravinsky', Musical Quarterly, Vol. 68, No. 4, 1982, p. 516
- 24 Robert Craft, 'Reflections on The Rake's Progress', The Score, No. 9, 1954, p. 24
- 25 Ibid., p. 30

- 26 Roger Sessions, 'Thoughts on Stravinsky', The Score, No. 20, 1957, p. 32
- 27 A danger, I feel, in the over-reliance on the identification of pitch-class collections in Stravinsky's music - see, for instance, Pieter C. van den Toorn on the octatonic collections in Stravinsky in The Music of Stravinsky (New Haven: Yale University Press, 1983). As Gloria Toplis comments in her review of the book ('Stravinsky's Pitch Organisation Re-examined', Contact, No. 27, 1983, pp. 35-8), the predominance of one triad (the 'tonic') in neo-classical works denies van den Toorn his octatonically defining characteristic of four divisions of the octave. 'He becomes as dogmatic and inflexible about the octatonic approach as he accuses others of being with the tonal approach'.
- 28 Igor Stravinsky and Robert Craft, Memories and Commentaries (London: Faber, 1960), p. 110
- 29 Igor Stravinsky and Robert Craft, Expositions and Developments (London: Faber, 1962), p. 113
- 30 Just as the surface stylistic differences between Stravinsky's Russian and neo-classical works attracted more comment than his consistency of compositional method, so today critics appear to prefer to discuss obvious changes in the materials a composer is working with rather than the deeper and more consistent manner in which those materials are being worked. Take, for instance, the music of Michael Finnissy - why should critics be so surprised by the stylistic differences between the apparent complexity of English Country-Tunes (1977) and the poignant simplicity of Unknown Ground (1990) when the substance of compositional process remains the same?
- 31 Joseph N. Straus, Remaking the Past. Musical Modernism and the Influence of the Tonal Tradition (Cambridge, Mass.: Harvard University Press, 1990), p. vii
- 32 Ibid., p. 1
- 33 Ibid., p. 6
- 34 Harold Bloom 'has used the work of Freud to launch one of the most daringly original literary theories of the past decade' [Terry Eagleton, Literary Theory: An Introduction (Oxford: Basil

Blackwell, 1983), p. 183], though this indebtedness to Freud is not immediately evident in Straus's interpretation. Bloom shows, according to Eagleton, that the 'meaning of a poem is another poem' and 'criticism itself ... is just as much a form of poetry as poems are implicit literary criticism of other poems'. [Ibid., pp. 183 & 185] Bloom's theory is set out in The Anxiety of Influence: A Theory of Poetry (Oxford: OUP, 1973); A Map of Misreading (Oxford: OUP, 1975); Kabbalah and Criticism (New York: Continuum Pub. Co., 1983); and Poetry and Repression: Revisionism from Blake to Stevens (New Haven: Yale University Press, 1976). Other musicologists have attempted to apply Bloom's theories to music in different ways from Straus, perhaps the most significant to date being Kevin Korsyn in 'Towards a New Poetics of Musical Influence', Music Analysis, Vol. 10, Nos 1/2, 1991, pp. 3-72

35 Remaking the Past, p. 16

36 Ibid., p. 184

37 Ibid.

38 Ibid., p. vii

39 Igor Stravinsky: The Rake's Progress, p. 31

40 I am not suggesting that Stravinsky was making a conscious reference to Monteverdi; simply, that there is a similarity of musical and dramatic function between the two fanfares. Though Stravinsky's comment that The Rake is 'deeply involved in Così' [Memories and Commentaries, p. 158] has suggested primarily classical models for this work, it seems to me that its frame of reference is much wider: it is almost as if The Rake attempts to distance itself from and comment on the operatic genre as whole. This might be one reason why, twenty years later, Stravinsky's librettist, W H Auden, was so fascinated by Stephen Pruslin's libretto for Birtwistle's Punch and Judy, which Auden described as 'one of the most original and outstanding opera libretti of the century'. [see sleeve note to the recording of Punch and Judy (London: Decca, 1980), HEAD 24/25] Pruslin's intention was to produce an opera about opera: 'It is an opera in quotation marks ... the collective generalisation of known operas into a "source-opera" which, though written after them, would give the illusion

- of having been written before them'. [Ibid.] In a different way, the same might be true of The Rake. Certainly, Stephen Walsh appears to be suggesting this when he writes: 'By combining all these different traditions in one opera, Auden and Stravinsky were not so much re-creating classical opera in a modern image as using a variety of historically connected ideas as co-ordinates for plotting an essentially modern line of thought' - The Music of Stravinsky (London: Routledge, 1988), p. 210
- 41 See the preface to Denis Stevens's edition of L'Orfeo (Sevenoaks: Novello, 1967), p. iv
- 42 Eric Walter White cites Stravinsky describing the Prelude as 'not an overture, or a prelude in the real sense, but simply the equivalent of "on va commencer"' - see Stravinsky: The Composer and his Works (London: Faber, 2nd ed. 1979), p. 459
- 43 A point made also by Joseph Straus in Introduction to Post-Tonal Theory (Englewood Cliffs: Prentice Hall, 1990), p. 10
- 44 Igor Stravinsky: The Rake's Progress, p. 35
- 45 Stravinsky's (and my) view here is in distinct opposition to Schoenberg's view of key. In his essay 'Problems of Harmony' of 1934 [reproduced in Style and Idea, ed. Leonard Stein, tr. Leo Black (London: Faber & Faber, rev. 1984)] Schoenberg defines tonality as 'the art of combining tones in such successions and such harmonies or successions of harmonies, that the relation of all events to a fundamental tone is made possible' (pp. 275-6). Later he asserts: 'One thing is certain: all chords, that in any way turn to a key, no matter how dissonant they may be, fall within the domain of the old harmony and do not disturb tonality' (p. 282).
- 46 Arnold Whittall, 'Musical Analysis: Descriptions and Distinctions' [Inaugural Lecture in the Faculty of Music, King's College London, December 1982], p. 8
- 47 Derrick Puffett, 'The Fugue from Tippett's Second String Quartet', Music Analysis, Vol. 5, Nos 2/3, 1986, p. 258
- 48 Edward T. Cone, 'The Uses of Convention: Stravinsky and his Models', Musical Quarterly, Vol. 48, No. 3, 1962, pp. 287-99
- 49 Paul Johnson, 'Cross-Collectional Techniques of Structure in

Stravinsky's Centric Music' in Ethan Haimo & Paul Johnson, eds., Stravinsky Retrospectives (Lincoln: University of Nebraska Press, 1987), pp. 55-75; Joseph Straus, 'Sonata Form in Stravinsky' in Haimo & Johnson, Stravinsky Retrospectives; Joseph Straus, Remaking the Past, pp. 96-103; Stephen Walsh, The Music of Stravinsky

- 50 Stravinsky in a programme note on the Symphony in C, Themes and Conclusions (London: Faber & Faber, 1972), p. 49:

Suvchinsky reported that the score of Tchaikovsky's First Symphony was on my piano, and this information, together with the discovery of a similarity of first themes in my Symphony and Tchaikovsky's, was responsible for the rumour that was soon giving model status to the latter. (If Suvchinsky had reported which Haydn and Beethoven scores were on my desk, no one would have paid any attention, of course, yet both of these composers stand behind at least the first two movements of my Symphony far more profoundly than any music by my much-too-lonely compatriot.)

- 51 Ibid.

- 52 Stephen Walsh, The Music of Stravinsky, p. 176

- 53 Ibid., p. 175

- 54 Eric Walter White, Stravinsky: The Composer and his Works, pp. 405-8

- 55 Roman Vlad, Stravinsky, tr. Frederick Fuller (Oxford: OUP, 3rd ed. 1985), p. 142. 'Here he not only adopts the thematic exposition and the technique of development inherent in this [symphonic] form, but he adopts them in a most consequential and rigorous manner, i.e. he accepts the cyclic form based on a single motif or thematic idea which permeates the whole work'. Ibid., p. 137

- 56 Francis Routh, Stravinsky [Master Musicians Series] (London: Dent, 1975), p. 97

- 57 Themes and Conclusions, p. 50

- 58 See, for instance, Hans Keller, 'Description, Analysis and Criticism: A Differential Diagnosis' in Criticism (London: Faber & Faber, 1987), pp. 134-48

- 59 Ernest Ansermet, taken from his notes to Les Fondements de la Musique dans la Conscience humaine, translated by Eric Walter White in Stravinsky: The Composer and his Works, p. 409
- 60 Walsh, op. cit., p. 178, citing Robert Simpson, ed., 'Introduction' to The Symphony, Vol. 2 (Harmondsworth: Penguin, 1967)
- 61 Straus, Remaking the Past, p. 97
- 62 Ibid.
- 63 '... my understanding of tonal music is rooted in Schenker's', Ibid., p. 197, note 1
- 64 This appeared in 'Fortlesung der Urlinie-Betrachtungen' ['Continuation of Urlinie Considerations'], Das Meisterwerk in der Musik [A Yearbook] (Munich: Drei Masken Verlag, 1926), pp. 37-9
- 65 Straus, Remaking the Past, p. 103
- 66 Arthur Berger, 'Problems of Pitch Organisation in Stravinsky', PNM, Vol. 2, No. 1, 1963, pp. 11-42; and see, for instance, Allen Forte, The Harmonic Organisation of 'The Rite of Spring' (New Haven: Yale University Press, 1978), and Pieter van den Toorn, The Music of Igor Stravinsky
- 67 Paul Johnson, 'Cross-Cultural Techniques of Structure in Stravinsky's Centric Music'
- 68 Ibid., p. 56
- 69 Straus, 'A Principle of Voice Leading in the Music of Stravinsky', Music Theory Spectrum, No. 4, 1982, pp. 106-24
- 70 Remaking the Past, pp. 98-101
- 71 Ibid., pp. 98 & 102
- 72 Ibid., p. 98
- 73 Edward T. Cone, 'Stravinsky: The Progress of a Method', PNM, Vol. 1, No. 1, 1962, pp. 18-26
- 74 The most celebrated example of such a melody is the bassoon line which opens The Rite of Spring, an interesting account of whose organisation is to be found in Jean-Jacques Nattiez, Fondements d'une sémiologie de la musique (Paris: Union Générale d'Éditions, 1975), pp. 279-85. Comparable two-part writing is to be found, for example, in the Symphonies of Wind Instruments, beginning at Fig. 15 (Cone's 'E' stratum).

- 75 See Walsh, op. cit., p. 177
- 76 Another reason why Stravinsky's introduction might seem less bold and humorous than the Beethoven Adagio has to do with its length. Brevity is the essence of wit: Beethoven's Adagio is only six bars long; Stravinsky's 'upbeat' lasts 39 bars. Walsh's comments on the first movement are equally pertinent here: 'One other evident quality of this movement which distinguishes it from Beethoven is its lack of conciseness ... Where Beethoven's music is driven forward by its inherent tensions, Stravinsky's forever turns back on passages which, in themselves, embody harsher tensions than those of classical music but lack a strongly implied resolution'. Ibid., pp. 177-8
- 77 Edward T. Cone, 'The Uses of Convention: Stravinsky and his Models'
- 78 Ibid., p. 292
- 79 'The ambiguity implicit in this three-note motive [B-C-G] evolves into a harmonic polarity powerful enough to generate a sonata form'. Joseph Straus, 'Sonata Form in Stravinsky' in Haimo & Johnson, eds., Stravinsky Retrospectives, p. 149
- 80 Robert Simpson, ed., 'Introduction' to The Symphony, Vol. 2, p. 10
- 81 Ibid., p. 11

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P A R T I I I

CHAPTER 4

Birtwistle and Klee

Harrison Birtwistle's quest for a solution to the problems presented in the previous chapters is an engaging and complex one. His music has a clearly-defined aesthetic lineage and belongs to a tradition of modern musical thought stemming from Stravinsky via Varèse and late Webern. He unites and develops these concerns to speak with a highly original voice. His music, the nature of its modernism, and the problematical questions of analysis and interpretation which it raises, are the subject of the remainder of this thesis.

The essence of Birtwistle's modernism is expressed in a notion of opposition – not necessarily a simple or even single kind of opposition but one which, nevertheless, underpins all his work. Michael Hall, as was discussed in Chapter 1 (see notes 88 & 89), has termed this Birtwistle's 'central organising principle' where a 'regular and uniform pattern' is opposed with 'something capricious and unpredictable'. This might involve anything from the simple proliferation of material derived from a single line (an idea originating with Paul Klee and which has come to take on greater significance in Birtwistle's more recent work) to the violent juxtaposition of widely divergent material (an idea taken to extremes in his works of the 1960s). Even his attitude to the act of composition itself embodies a similar kind of opposition where he talks of the containment of an instinctive, anti-analytical approach by conscious working methods (see the discussion below). Yet, whether the oppositions are a Stravinskyian pitting of the regular against the

irregular, a Varèse-like concern for the placement of musical objects in space rather than for the logical organisation of harmony and organic evolution of material, or, in Birtwistle's own terms, for the fascinating paradox of the 'mechanical pastoral', all these ideas are delimited or contained in some way. Frequently this is achieved within the context of a theatrical or dramatic impulse but is as often brought about by such background notions as 'symmetry' or 'balance' which give the oppositions meaning without synthesising or dissolving their inherent contradictions.

The roots of Birtwistle's modernism, as has already been suggested, lie in the work of early-twentieth century modernists such as Stravinsky, Varèse, Webern and even Satie. However, his ideas are as much derived from other arts such as film, theatre and particularly the visual arts. Indeed, visual stimuli have been a constant source of compositional material for Birtwistle: 'The notion of how you look as opposed to how you listen opened certain doors for me in composition'.

[1] Though his creative imagination has been stimulated by the work of those as diverse as Aeschylus, Piero della Francesca, Dürer and Eisenstein, it is to the paintings, drawings and writings of the modernist, Paul Klee, that Birtwistle has consistently been drawn. The discussion which follows attempts to define what it is that Birtwistle has found in Klee and, in so doing, to come closer to an understanding of Birtwistle's modernist aesthetic, as well as suggesting possible analytical approaches to the music.

Paul Klee (1879-1940) was at the centre of the modern movement in the visual arts in Europe during the earlier decades of the twentieth

century. He was involved with many of the major artistic innovations of his time. His earliest work reflected the influence of the prevailing Jugendstil or Art Nouveau style; German Expressionism left its mark and in 1912, along with Kandinsky, he joined the so-called Blauer Reiter group of artists in Munich; a fascination with Cubism led to the study and gradual absorption of this style and his association, as a teacher, with Walter Gropius's Bauhaus (founded in Weimar in 1920) resulted in a more systematised approach to his work and the gradual emergence of a Constructivist thinking. In 1925 Klee even took part in the first exhibition of Surrealist painters in Paris.

Yet Klee remained an individualist. Though his work reflected important contemporary trends he never formally aligned himself exclusively with any particular style. As Giulio Carlo Argan, the author of the preface to the Italian edition of Klee's Notebooks has put it, '... Klee, more than any other artist of our century, was consciously detached from the mainstream of modern art and its theoretical assumptions'. [2] From his many published writings and lecture notes it is clear that he always began the creative process afresh for each new work, being concerned only with the two poles of his art: expression and structure – that is, with a 'spiritual reality' beyond the canvas achieved through a clear and exact understanding of line, tone and colour, of 'points, and linear, plane and spatial energies'. [3]

But Klee was also an accomplished musician. His father was a music teacher in Berne, the city of Klee's birth. Klee grew up surrounded by music and became a successful (and sometime professional) violinist, performing much chamber music. He was apparently impatient

with amateur musicians and suspicious of other artists who tried to find analogies between their painting and music. [4] He harboured a passion for, and depth of knowledge of, the music of Bach and Mozart as well as an enthusiasm for the music of the moderns – among them Debussy, Hindemith, Schoenberg and Stravinsky. One contemporary musician recalled hearing Klee play Bach's fourth suite for violin: 'No one grasped and brought out the spirit of the piece as firmly as he, without the slightest stressing of the emotional; pure musical structure.' [my emphasis] [5]

It is hardly surprising, then, that Klee thought of painting in musical terms. In his theoretical writings he reveals a constant concern for movement in his work, for a sense of a picture's 'dynamic'. The very first figure in the Pedagogical Sketchbook, for instance, shows a line as something active, 'moving freely ... the mobility agent is a point, shifting its position forward'. [6] Unlike other painters, Klee appeared to consider music and painting analogous because they were comparable temporal arts. [7] We need look no further than his Notebooks, which contain his writings on 'a theory of pictorial form', for evidence to support this. One section is directly concerned with 'succession, or the temporal function of a picture' while two further sections on structural formation are devoted to a discussion of rhythm. There are many other references elsewhere to music. [8] For instance, Klee draws a comparison between acoustic rhythms and planar images and makes an interesting distinction between 'cosmic rhythms' (such as day and night), 'organic rhythms' (such as blood circulation) and 'cultural rhythms' (such as music). Examples of the last of these are taken from a wide variety of sources including conductors' beats, Mozart's Don

Giovanni and a revealing graphic representation of a piece of 3-part writing by Bach. [9]

This fascinating fusion of visual and musical ideas is, no doubt, one of the reasons why Birtwistle is attracted to the work of Klee – and, in one instance, it has resulted directly in a musical composition, namely Carmen Arcadiae Mechanicae Perpetuum (1977) (see Chapter 7). [10] He often speaks of Klee's ideas in relation to his own – there are numerous references to Klee, for instance, in the published conversation of 1983 between the composer and Michael Hall. [11] But more than this, Birtwistle seems to think of his compositions, particularly their forms, in a distinctly 'Klee-like' way. An Imaginary Landscape (1971) has a title taken from Klee and he has spoken of other works in a similar vein, e.g. Silbury Air (1977). [12] He talks of landscapes, maps and points; he thinks of structure in terms of processes and 'journeys' rather than as formal ready-mades; he discusses musical ideas as objects or as geometrical shapes which can be viewed in a variety of different ways. [13]

There are other striking correspondences between the work of composer and artist apart from their common interest in both visual and musical ideas. Though born nearly sixty years apart, both seem to have a parallel modernist outlook. Though each is at the centre of developments in his respective art, studying and absorbing contemporary styles, both remain 'outsiders' to a large extent, individualists, defining their own styles and modi operandi.

However, in one respect the two men are very different: whereas Klee has left countless writings explaining his theory of art and giving clear indications as to how to put it into practice, Birtwistle has

remained virtually silent. It is for this reason that a more detailed examination of Klee's ideas and a comparison of these with Birtwistle's procedures might prove fruitful in providing at least the possibility of a critical and analytical framework within which the music of Birtwistle can be discussed. Birtwistle is more like Edgard Varèse in this matter: Varèse was also an individualist, as interested in developments in literature and the fine arts as he was in music, and yet, as has already been seen, he refused outright to discuss his techniques of composition. Furthermore, as Jonathan Bernard points out, Varèse had a deep dislike of musical analysis: 'He preferred to speak analogically, not analytically, of his music, often with reference to physical phenomena ... Attempts to involve him in more narrowly defined, "analytical" discussions made him uneasy'. [14] In support of this, Bernard cites Varèse's published comment that: 'By its very definition analysis is sterile. To explain by means of it is to decompose, to mutilate the spirit of a work'. [15]

Birtwistle, too, would appear to harbour a degree of antagonism towards analysis, preferring to talk in general terms about the nature of his musical ideas and structures, about theatre and drama, rather than about the specifics of pitches. Because analytical theory is rarely compositionally prescriptive, it can only deal with 'old' music, i.e. it draws its conclusions from and about works which have already been written. [16] Birtwistle, on the other hand, does not seem to gain much pleasure from talking about works he has already written: it is the piece he is about to write or is in the process of writing that interests him. Questioned once about certain pitch configurations in The Triumph of Time, Birtwistle responded that he 'couldn't remember'

what he'd done [17]; asked whether he liked attending performances of his own music, he replied that he only enjoyed first performances because:

Once I know that it [the piece] has a life to exist, then it's OK. I have to come to terms with how it's worked; I have a little slot, and I know what that piece is. There's not much you can do about it then: it's too late. [18]

In keeping with his ideas of composition as a forward-looking, linear process - he claims he never looks back over a piece to see where the ideas have come from [19] - his own compositional history is not subject to a great deal of self scrutiny. The fact that analysis attempts to deal with the past, however immediate, rather than the future is reason enough for him to maintain his suspicion of analysis. Nevertheless, he appears to be quite happy to let others discover aspects of his music of which he was not consciously aware during its composition: 'A composer doesn't necessarily know what he's composed. He needs others to tell him'. [20] By undertaking to analyse the music of Birtwistle, I am not merely acting as oracle on behalf of the composer, trying to articulate ideas which he, were he more gregarious or, indeed, less 'instinctive', might choose to reveal to the world for himself. I am also attempting to elucidate possible meanings by placing his music and ideas in a broader cultural and intellectual context. Otherwise, I should be involved merely in an act of description, not one of analysis.

A further link between the aesthetic of Birtwistle and Varèse is to be found in their common interest in the visual arts. Considering Varèse's avowed propensity for geometrical structures, particularly influenced by the thinking of the Cubists, it is also very likely that

he would have come into Klee's sphere of thinking. [21] Though Bernard does not discuss directly the influence of Klee on Varèse, the two artists were virtual contemporaries (Klee was, in fact, just four years older than Varèse). They would have been in Paris at the same time (Klee visited the city, where Varèse was living, in 1912), and would have moved among the same artistic circles: both numbered Robert Delaunay among their acquaintances, for instance. Certainly Varèse's references to spatial planes, moving figures and the pre-eminence of rhythm, for instance, are very close to the style of theoretical language employed by Klee. For Birtwistle, then, the ideas of both Klee and Varèse obviously represent a particularly stimulating and relatively independent kind of modernist thinking.

The Pedagogical Sketchbook

In 1920, Walter Gropius, the architect, invited Klee to Weimar to be a 'Master' at the new Bauhaus, a body of artists and craftsmen dedicated to the creation of the 'unitary' work of art and to teaching students, in essence, about form. Klee's Pedagogical Sketchbook, the second of fourteen Bauhaus books edited by Gropius and L. Moholy-Nagy, was published in 1925, 'the abstract of Paul Klee's inductive vision'. [22] Its central concern is form and the way in which form is derived from nature. Hall informs us that, for many years, the Pedagogical Sketchbook was Birtwistle's 'musical bible'. [23] It evidently played a profound role in shaping the composer's formal thinking. Thus, an examination of Klee's ideas and working methods, as presented in the Sketchbook, provides an appropriate context for a detailed discussion of

formal tendencies in Birtwistle's music.

What follows forms a general introduction to trends in the music of Birtwistle and takes the four main divisions of Klee's Sketchbook as its starting point: 'Proportionate Line and Structure', 'Dimension and Balance', 'Gravitational Curve' and 'Kinetic and Chromatic Energy'.

1: 'Proportionate Line and Structure'

The first part of Klee's Sketchbook deals initially with the ways in which a static dot or point can be transformed into something dynamic, something linear. A line can be simply a line, it needs no necessary direction or intention, but it is always in motion, always dynamic: 'A walk for a walk's sake'. [24] This line can be accompanied by various forms which reflect its essential motion, which are given meaning or motivation by it, and yet which remain relatively independent. These can take the shape of complementary ideas, secondary lines or even by the line circumscribing itself. (Fig. 4-1)

Immediately certain general parallels with Birtwistle's formal thinking become apparent and help us to place our analytical/musical observations in some kind of critical context. The idea of the motivated, non-directional line lies at the centre of Birtwistle's structural thinking. There is nearly always a 'line' of some kind in his music which often begins with a 'point' and is extended in time to provide a formal context for other complementary kinds of musical activity. Take, for instance, the favourite starting point of much of his music, the pitch-class E. This initial idea is taken 'on a walk ...

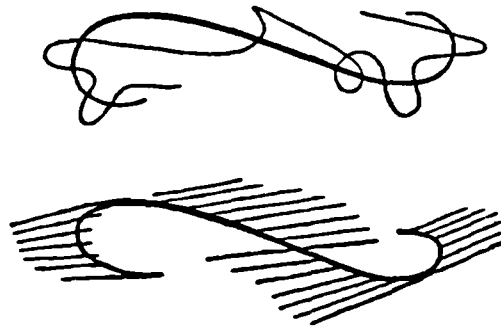
Fig. 4-1

'An Active Line on a Walk'

An active line on a walk, moving freely, without goal. A walk for a walk's sake. The mobility agent is a point, shifting its position forward



The same line, accompanied by complementary forms



The same line, circumscribing itself



Two secondary lines, moving around an imaginary main line



shifting its position forward' and becomes a musical line. The Four Songs of Autumn (1987) are a particularly pertinent example of this where the E point is extended in time to become a line, shifting its plane for each song and 'circumscribing itself' (in terms of its register and rhythmic variants) but generating the context within or against which the rest of the music is heard to operate (see the analysis in Chapter 8 below). Its linear intention is quite clearly determined though its actual length is influenced by other factors.

The Fields of Sorrow (1971) might be considered a paradigm for such a process. Certainly, the idea of the 'processional', common to many of Birtwistle's works of the 1970s, could be understood in these terms. The composer's description of aspects of the structure of The Triumph of Time (1972) is close to Klee's ideas of how a line moves: '... parts of the procession must already have gone by, others are surely to come: a procession made up of a (necessarily) linked chain of material objects which have no necessary connection with each other ...' [25], and is echoed in his ideas on his more recent trumpet concerto, Endless Parade (1987). It is interesting that he should choose to relate time in The Triumph of Time to linear motion (a procession) and that the work's title (though not, he insists, the musical ideas) is appropriated from a painting – in this case, Breughel's Triumph of Time. The musical work was given its title only after it had been completed. Klee, too, was in the habit of giving his paintings a name only after he had finished them, often a long time afterwards.

A further kind of line found in Birtwistle's work is derived from the notion of a cantus firmus, a melody which 'takes a walk' through the music. Michael Hall has written at length about the origins and practice

of Birtwistle's interest in medieval compositional ideas - in particular, his discussion of Verses for clarinet and piano (1965). Such concerns have remained with Birtwistle, as seen, for example, in the endless melody or 'cantus' of Secret Theatre (1984) (see Chapter 6), and the fundamental melodic line which appears to lie at the heart of Gawain (1991). [26]

Ideas of linearity can also be given overtly dramatic/theatrical motivation. The apparent starting point of his opera, The Mask of Orpheus (1973-83), is again the 'point' E: the first clearly-defined pitch heard in the work is Orpheus the Singer's 'discovery' of music out of speech. Other more complicated kinds of lines provide background continuity, such as the ebb and flow of the tides (electronically realised) in Act III of the opera. This is not to suggest for a moment that the 'plot' of Orpheus is at all linear in conception: both Zinovieff's libretto and Birtwistle's music are extremely sophisticated and multi-layered constructions which have little to do with conventional narrative (linear) structures (unlike Gawain which does appear to be more concerned with traditional 'operatic' kinds of narration). Nevertheless, there are important threads of continuity within Orpheus which a comparison with Klee's ideas helps to identify. In the same way, though line plays a crucial structural function in Klee's pictures and drawings, they can never be read in any conventionally naturalistic way.

At this point, it is important to introduce a note of caution. It is very easy - perhaps too easy - to see parallels between Klee's use of line in his work and horizontal ideas in Birtwistle's music. It cannot be said that what Klee is doing with line in space is the same as

Birtwistle is doing with sound in time: the dimensions of time and space are not equivalent. However, we have already seen that, though individualists, both artists are archetypally modernist in their promotion of the placement of (musical/visual) ideas in 'space' rather than demonstrating a concern for the organic evolution of ideas. Furthermore, by pinpointing the (visual) sources of some of Birtwistle's structural ideas and highlighting the similarities between the work of artist and composer, we are perhaps better able critically to assess those important aspects of their shared modernism.

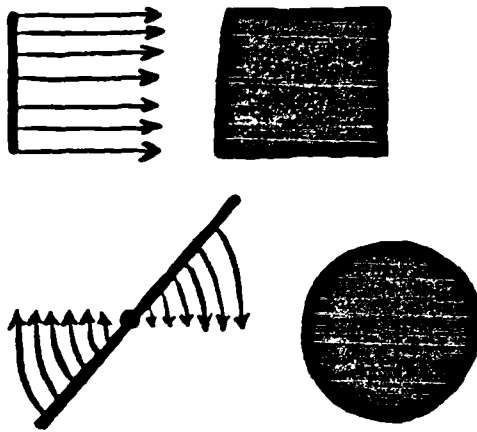
To return to the Pedagogical Sketchbook: Klee next discusses two-dimensional planes which are brought into being by the simultaneous movement of lines. (Fig. 4-2) [27] Although their equivalents in musical terms are less easy to identify, such features made of individual ('passive') lines do appear to exist in Birtwistle. The kind of musical layer found in The Fields of Sorrow, for example, is made, initially, not of one strand centred on a single E, but of a block of sound starting simultaneously with four different Es - firstly on pianos, later taken up by choir, soprano soloists and vibraphone. The 'space' or 'plane' thus occupied is further defined by linear movements within it, often simple symmetrical motion either side of the pivotal Es. The same idea is to be found at the end of the work, but now centred around Ds.

The use of 'pitch wedges' in many of Birtwistle's pieces is another instance of the kind of 'activation of planes' referred to by Klee. [28] They can be found, to name just three early examples, in Refrains and Choruses (1957) (see the discussion in Chapter 5), Chorales for Orchestra (1960-63) and La Plage: Eight Arias of Remembrance (1972).

Fig. 4-2

'Passive Lines which are the Result of an Activation of Planes'

Passive lines which are the result of an activation of planes (line progression)



Passive angular lines and passive circular lines become active as planar constituents.

Beginning from a single point – usually an E – a wedge shape gradually emerges, filling out its musical space symmetrically, to provide a musical layer around which other musical ideas can operate.

Klee next proceeds to examine structure which he argues is articulated by means of repetition – what he terms 'structural rhythm'. In its simplest form, such rhythmic articulation is achieved by the repetition of the same unit; on a larger scale, more complex units are built up, also of repetitions, which are themselves repeated. Individual structures also exist which cannot be reduced merely to a repeated numerical sequence, but even these are assessed in linear terms as ratios such as that of the Golden Section. [29] It is an obvious fact that repetition is an important structural device in Birtwistle's music. From the repetition of the smallest stimulus to form a regular pulse, through repetitive devices or 'mechanisms' which continue until their usefulness is exhausted, to large-scale repetition of whole passages, Birtwistle employs repetition on all levels of musical structure. Overt examples of regular pulsation are to be found in a number of works of the 1970s and early 1980s which have primarily rhythmic preoccupations – their titles such as Chronometer, Pulse Field and Pulse Sampler bear witness to this fact. Indeed, the tape piece, Chronometer (1972), is built entirely from the regular sounds of different clocks, juxtaposed, superimposed, combined in all sorts of ways, to produce an end result which is far from regular and predictable. Interestingly, it is one of Birtwistle's few forays into an electronic medium and is his only exclusively electronic piece.

Repetition of other kinds generates the structures of Birtwistle's music. Let us consider for a moment the large-scale organisation of two

of his major theatre pieces, the operas Punch and Judy (1966) and The Mask of Orpheus. Each of these works (with the collaboration of his librettists, Stephen Pruslin and Peter Zinovieff respectively) is constructed according to various repeated cycles of musical and dramatic events. Each cycle is quite clearly labelled numerically making its position in the overall structure clear. For instance, the largest sequence of cycles in Punch and Judy is that of the 'Melodramas'. Though never repeated exactly, their substance remains constant and the pattern of their regular recurrence articulates the music's structure ('divisional articulation ... purely repetitive and therefore structural', as Klee would have it). The same is true of the large-scale sequence of cycles of 'Murder Ensembles' and 'Quests for Pretty Polly'. Each of these larger cycles is built of a number of smaller, self-contained musico-dramatic units, also clearly labelled, which are themselves repeated and constitute a lower-level cyclical sequence: 'Proclamation', 'Passion Chorale', 'Travel Music', 'Weather Report', and so on. And even within each of these units, repetition can play a structural role, whether it be a simple strophic device as in Punch's and Judy's Lullabies or a more mechanical repeating musical device as to be found, for instance, in the 'Morals' (whose detail is discussed in Chapter 6). So on every level of the opera, repetition (usually involving juxtaposition) is a crucial structural element.

The same is true of Orpheus whose intricate and complex structure is built of a series of interlocking cycles, all operating in threes: three acts subdivided into three scenes, each with three further subdivisions; three 'Ceremonies'; three 'Passing Clouds of Abandon'; three 'Allegorical Flowers of Reason'; and so on. Like Punch and Judy,

It is an opera of 'recitatives' and 'arias', each of which is numbered in groups of three. Again it can be seen that, as for Klee, number and proportion are highly significant. This is at its most obvious in the central act, concerned with Orpheus's descent and return from the underworld, which is dominated by the device of the 'Arches' – given in the libretto as 'a visionary architectural structure with practical applications. It is the most mathematical of the three [large-scale structures] and dominates the words, music and action of Act 2'. [30] Its role as a conceptual/structural element is underlined by the fact that composer and librettist do not intend the arches to be literally represented in any production of the opera. There are seventeen arches in all, each one related yet different. The specific content of each arch is also numerically determined (and this is discussed below). We have here a clear example of a visual image being used as a musico-dramatic structural device and can usefully be interpreted as a parallel to Klee's notion of a structural rhythmic concept built by means of repetition. [31]

Large-scale repeating musico-dramatic cycles are also central to Birtwistle's two most recent stage works. An old northern shepherd's spell, for instance, through its repetition, plays an important structural role in Yan Tan Tethera (1984):

Yan, tan, tethera
 1 - 2 - 3
 Sweet trinity
 Keep us
 And our sheep.

'The Turning of the Seasons' and 'Gawain's seduction' are the two principal recurring devices in Gawain. In these examples from both

works, however, structural dramatic repetitions do not preclude processes of musical variation (thus encapsulating Birtwistle's more recent fascination with repetition and non-repetition, the co-existence of the cyclical and the linear - as discussed below).

Verses for Ensembles (1969) provides us with examples of a number of different kinds of structural repetitions on various levels. One kind is comparatively rare in Birtwistle's oeuvre, namely exact repetition. The entire passage between rehearsal figures 18 and 30, itself built from different repeated, juxtaposed blocks of music, is repeated note-for-note between figures 58 and 70. These are the structural pillars around which the entire piece is constructed and as such are an example of what Klee described as 'the most primitive structural rhythm based on a repetition of the same unit from left to right'. Between these two 'pillars' is a section of music also built of varied repetitions but now taking the form of Birtwistle's characteristic verse-refrain pattern. The horn line remains constant (an elaborate kind of 'ground' or 'chaconne') while, in turn, each of the high-pitched woodwind instruments weaves a free verse around it, related yet independent, and decorated by the percussion. We thus have a further instance here of Klee's line 'on a walk', 'accompanied by complementary forms'. The refrain which articulates this recurring cycle of verses at regular intervals is a repeated unit, a 'musical object', which is always the same yet always different. It is an example of a particular musical device which has developed a greater significance in Birtwistle's more recent work (in, for instance, Yan Tan Tethera, Endless Parade and Gawain) and is concerned with 'multiple objects', with a procedure whereby any idea can only be assimilated by

viewing it in many different ways and from many different angles. By such means it is possible to build up an image of the 'three-dimensional' whole.

In Verses for Ensembles this 'object' takes the form of a ritornello for four brass instruments which is identical in the score every time it recurs. In performance, however, each sounds strikingly different as the players are given a high degree of choice as to which 'route' they take through the music, and whether the music is to be played loud or soft, legato or staccato, muted or unmuted. As Birtwistle himself has commented, 'What I find interesting are those situations where I create the multiple object but others select what facet is to be looked at'. [32] Again he appears to be regarding his own musical constructions here primarily in visual or planar terms rather than in temporal ones as a means of elucidating his structural intentions. A comparison with Klee's ideas can perhaps help us to understand better the ways in which Birtwistle articulates his musical structures by means of repetition. Certainly, we can see that Klee's structural and individual rhythms have their parallels in Birtwistle's work which might be expressed more generally as the (decidedly modern) way in which a regular procedure provides the context for the irregular procedures which complement it. This also suggests that an examination of the structures of Birtwistle's music in terms of symmetries and/or proportions might well be a positive way of accounting for the overall logic or coherence of a work without in any way attempting to deny or synthesise the inherent contradictions or oppositions which generate the material in the first instance.

In the Pedagogical Sketchbook Klee turns from geometric

proportions to the structure of natural objects. He examines the make-up of natural materials (bones, ligaments, tendons) and then considers the relationship between such things. In nature as in geometry he makes a distinction between structural and individual units. He comes to the conclusion that there is a 'hierarchy of function' between units that is of primary significance; any object in itself is relatively insignificant: 'One bone alone achieves nothing'. The reader is furnished with a variety of supporting examples: the waterwheel and hammer (see Fig. 4-3), the watermill, the plant, propagation and the circulatory system. [33] Klee's studies of and writings on nature were extensive; natural objects frequently occur in his paintings and drawings (human figures, fish, birds, plants, etc.). His relationship with nature lay at the centre of his artistic philosophy:

For the artist communication with nature remains the most essential condition. The artist is human; himself nature; part of nature within natural space. [34]

Yet he never used natural objects naturalistically; they existed simply as familiar images on the surface of a work intended to draw the viewer into the deeper spiritual reality of a picture:

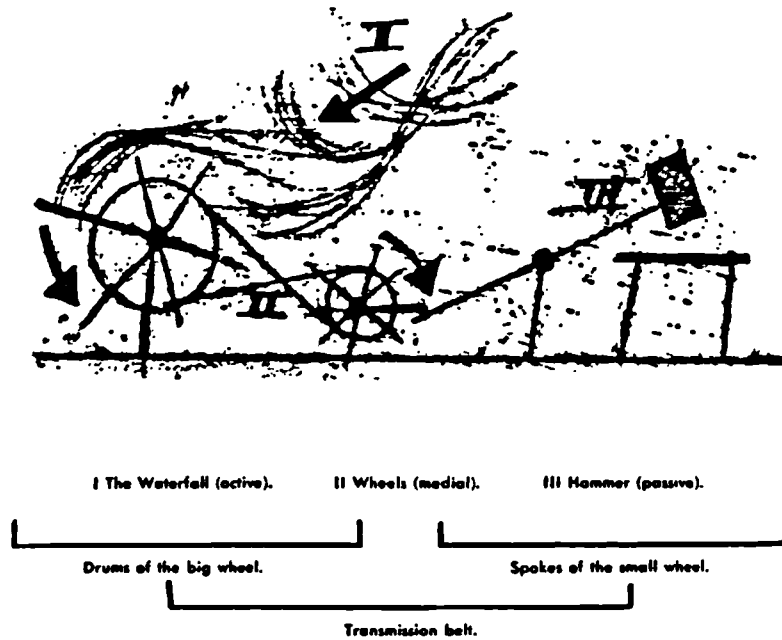
His forms are derived from nature, inspired by observation of shape and cyclic change but their appearance only matters in so far as it symbolises an inner actuality that receives meaning from its relationship to the cosmos. [35]

Birtwistle, too, is fascinated by nature and, like Klee, incorporates ideas derived from observations of natural processes into his music without, in any way, attempting to represent such ideas literally. The titles of certain works indicate a natural geographical source, e.g. An Imaginary Landscape (1971), Silbury Air, Duets for Storab (1983); others

Fig. 4-3

'Waterwheel and Hammer'

Waterwheel and Hammer



reflect ongoing pastoral themes, e.g. Narration: A Description of the Passing of a Year (1963), Down by the Greenwood Side (1969); others have a more comic (and decidedly Klee-like) intention, e.g. Some Petals from my Twickenham Herbarium (1969). For Birtwistle, natural cycles and the timelessness of myths associated with certain places coincide with his interest in the significance of ritual in music and drama. The rhythm of the passing seasons, the tides, the eternal round of night and day, are immutable natural phenomena on which Birtwistle draws in many of his works to provide a background context for certain cyclic structural musical elements. Places and landscapes, too, can generate a purely technical, musical response e.g. the 'music of the hill' in Yan Tan Tethera which not only evokes a place of mystery and magic in the opera but also acts as an important structural musico-dramatic device; the composer's understanding of the stratification of the elements of the earth's crust gives the substance of the structure of the massive orchestral work, Earth Dances (1986) (Indeed, its very title suggests a fusion of what Klee would call 'cosmic' (earth) and 'cultural' (dance) rhythms). [36]

Birtwistle's allegiance to what has been loosely termed the 'pastoral tradition' is interesting. Many of his dramatic works have pastoral themes or settings. Yan Tan Tethera is subtitled a 'mechanical pastoral', a combination of ritual and myth. Down by the Greenwood Side and Bow Down (1977) are both based on pre-industrial folk tales (one a retelling of the medieval Mummers Play, the other derived from the Ballad of the Two Sisters) and are concerned with ritualised violence in a 'pastoral' context. Nenia: the Death of Orpheus (1970), The Fields of Sorrow and, of course, The Mask of Orpheus, as well as various works

based on translations of fragments from Sappho such as Entr'actes and Sappho Fragments (1964) and Cantata (1969), all follow, in different ways, the ancient Greek pastoral tradition and allow Birtwistle the possibility of exploring extreme and complex emotional states in a stylised, ritualistic, mythical context. Gawain continues in this vein and is another retelling of a ritualistic English folk myth where the 'Turning of the Seasons' presents a highly stylised, mechanical representation of nature.

Thus, in the pastoral tradition, Birtwistle's two principal dramatic sources, Greek mythology and English folk legend, are brought together. Although, in technical terms, his music is not at all 'nationalistic', i.e. its sources are more generally European (Messiaen, Stravinsky, Webern, Varèse ...) rather than identifiably 'British' or 'English', nevertheless Birtwistle's interest in pastoral matters identifies him with a persistently English penchant extending back to the sixteenth, seventeenth and eighteenth centuries (e.g. Spenser, Milton, Sir Philip Sydney's Arcadia, and even Handel's operatic interpretations of Ariosto and Tasso, themselves reworkings of Greek and Roman poetry). In the twentieth century, Ralph Vaughan Williams was one of the principal inheritors of the notion of an English rural idyll, resulting not only in such works as the Pastoral Symphony (1922) but also, with the collaboration of Cecil Sharp, in the first systematic study of the British folk music tradition. On Birtwistle's own admission, Vaughan Williams was an important early influence (he has described his schoolboy compositions as 'sub-Vaughan Williams' [37]) yet, although certain melodic/modal features may persist in his music, I do not believe it is particularly productive to read these as

representing some characteristically English strain in his music, any more than I think it is possible to see the industrial landscape of his native Lancashire reflected in the oppositions of his musical structures. [38] Birtwistle's Arcadia is not some idealised rural dreamland but a very real context for the exploration of fundamental and often violent human truths. Modernism is in essence a 'supranatural' phenomenon where, it could be said, the pastoral needs also to be mechanical. Nature, for both Birtwistle and Klee, cannot be represented 'in itself' but serves an 'intermediary' function between an apparent surface reality and deeper spiritual values.

The final part of the first section of Klee's Sketchbook is devoted to a demonstration of 'productive and receptive movement'. [39] A work can be produced by either an additive ('stone on stone') or a subtractive ('piece from piece') method, and both, Klee insists, are 'time-bound'. Almost as soon as a work has begun to be created, there is a 'counter-movement', a receptive movement, i.e. the creator looks to see what he has achieved: 'the eye travels along the paths cut out for it in the work'. It is difficult to imagine a counterpart to this receptive movement in music. The listener cannot 'graze' his or her way through a piece of music in the same way that Klee suggests the eye moves over the surface of a picture although it is possible for the ear to change its focus in listening to multi-layered pieces. However, equivalents of the temporal additive or subtractive constructive methods are common in Birtwistle. Take, for instance, the 'Passion Chorales' in Punch and Judy:

Day murdered fame one game lost
Dreamer dread flaming lust
Deforming lameness
Deaf or nameless
Demon dared
Dam-ned
Dumb

Pruslin has provided Birtwistle with a text whose process is subtractive (starting with seven syllables, each line is reduced by one until we are left with just one syllable) and which is, of course, time-bound. The music Birtwistle provides seems to contradict this process to some extent in that it is more obviously linear (through composed?), almost as if he is placing Pruslin's arithmetical game in inverted commas. Or perhaps he is attempting to focus the listener's attention on the play on the sounds of the words rather than the formality of their structure. Whatever the reason, there appears to be an interesting tension here between text and music: Birtwistle is not just 'setting' the text. This might also be expressed in Klee's terms as a tension or movement between what has been produced and how it is received.

A similar procedure can be found in the instructions Zinovieff gives the composer for the music for each of the arches in Act 2 of Orpheus. To get from the Mountainside of the Living to the Mountainside of the Dead, Orpheus passes over an imaginary channel supported by the seventeen arches and which structure his vast Second Song of Magic. Each arch corresponds with a verse of the Song. Each is built of a different material, each represents a different aspect of the world (from 'countryside' and 'crowds' to 'order' and 'fear'), and each is divided into four sections forming, in turn, two overlapping types of expression: dream (fact and fantasy) and nightmare (fantasy and distortion). Each arch gets progressively narrower so each verse is

shortened by three seconds (the 'subtractive method' – note again how space almost becomes time). Furthermore, the proportion of nightmare to dream increases the further Orpheus moves over the arches and so the temporal proportions of these also change in each verse (by a combination of addition and subtraction in fixed proportions). Or, as Zinovieff puts it, 'the waxing and waning within each arch of the properties of fact, fantasy, distortion and awakening are called waves'. [40] An indication of their relative proportions is given in the libretto as follows:

Arch Number	1	2	3	..	15	..
Arch Total						
Duration	2'36"	2'33"	2'30"	..	1'54"	..
Nightmare	30"	39"	48"	..	1'53"	..
Dream	2'20"	2'15"	2'08"	..	07"	..
Fantasy	14"	21"	26"	..	06"	..

The Mask of Orpheus is an elaborate and complex 'lyrical tragedy' where the relationship between music, words and action is so intricate that it is impossible to understand one element out of the context of the others. [41] Nevertheless, the same structural principles appear to guide the hand of both librettist and composer and thus provide coherence.

2: 'Dimension and Balance'

The first part of this second section of the Sketchbook deals with dimension and, in particular, with perspective. [42] Inasmuch as this is a pictorial convention, it would seem to have little relevance to an

understanding of dimension in Birtwistle's music. [43] However, Klee is at pains to point out that it is the position of the viewer that is important, and in his actual pictures it is quite clear that he does not hold the unitary understanding of perspective that the Sketchbook might at first suggest. The editor of Klee's Notebooks has placed Klee's theoretical writings and drawings on perspective next to examples of his work which bear out or develop these ideas. For instance, the objects depicted in the watercolour Uncomposed Objects In Space (1929) do not follow a central perspective but actually demonstrate a shifting viewpoint which generates movement and countermovement. As Spiller observes: 'Through this compensation of movement and countermovement, a compositional balance, i.e. a symmetrical impression, is created'. [44]

These ideas in the context of Birtwistle's music have already been discussed with regard to structural repetitions. An ongoing obsession of the composer's is his interest in viewing the same object, not from one perspective but from many different and constantly changing angles. This idea has been realised in many ways throughout his works: as the ritornelli in Verses for Ensembles (see above), as the various retellings of the same mythological material in Orpheus, or even as the constant round of counting in new and changing contexts in Yan Tan Tethera. Birtwistle has discussed the dimensions of his trumpet concerto Endless Parade in strikingly visual terms. The piece was the direct result of a visit to the medieval Italian walled town of Lucca where he found a carnival procession (another line!) winding its way through the town's narrow streets:

I became interested in the number of ways in which you could observe this event: as a bystander, watching each float pass by

... or you could wander through the side alleys, hearing the parade a street away, glimpsing it at a corner, meeting head on what a moment before you saw from behind. Each time the viewpoint was different, yet instantly identified as part of one body. [45]

He is again using spatial terms to describe the temporal dimensions of his work. The idea of the shifting or multiple viewpoint is not, of course, unique to Klee and Birtwistle; as was seen in Chapter 1, such issues were very much a part of the debate about modernism in the earlier years of the twentieth century. What is interesting here is the way artist and composer interpret this notion and the visual analogies made by Birtwistle can provide a useful framework within which the analyst can begin to examine the processes by which his musical material is manipulated.

The second part of the Sketchbook's second section is devoted to a discussion of balance, a structural concept at the core of Birtwistle's work. Klee first explores the idea of symmetrical balance where, if a scale's balance is disturbed, this is corrected through counter-weight resulting in a 'counter-effect'. This he defines as 'symmetrical balance as restoration'. [46] Klee then introduces us to an even more important concept, that of 'non-symmetrical balance' where an object which is 'too heavy' can have its balance restored by adding more 'light' to compensate. The same is true in the case of proportions and colours. [47] What is crucial is the establishment of an equilibrium from these unequal elements - or, in the words of Sibyl Moholy-Nagy, 'It is the balancing and proportioning power of eye and brain that regulates this expansion of the object toward equilibrium and harmony'. [48]

As we shall see later in the complete analyses of representative

examples of Birtwistle's music, the concepts of balance and symmetry take on great importance. These elements play a crucial role in accounting for the music's structural coherence on many levels. Michael Hall has identified symmetries as 'an important ingredient' of Birtwistle's style though he does not go much further than describing surface patterns or formal balance. He isolates three particular kinds of symmetry operating in the music: rotational symmetry (e.g. isorhythmic techniques), bilateral symmetry (mirroring), and translational symmetry (i.e. by means of repetition as in, for example, what Hall calls his 'basic rhythmic cell', the 'heartbeat'). [49] In fact, as has already been indicated, exact symmetries are comparatively rare in Birtwistle's work and are generally used locally as means of generating pitch material. We have already seen one example of this in the pitch wedges where a line is created by moving symmetrically either side of a fixed starting point (bilateral symmetry). Such procedures, when they occur, are never hidden; they lie quite obviously on the surface of the music almost as a 'given', something which the listener can readily identify and against which other, more sophisticated musical activities can be judged. His use of random number charts as an aid in generating pitch material have a similar function (though, of course, they cannot be 'heard'). Stephen Walsh has commented on such procedures:

... It seems that random numbers and mechanical schemes do not have a great bearing on the essentials of Birtwistle's music (otherwise it would hardly impress us as an integrated body of work) but they do valuably generate 'situations' within which he can work, and they do trivial work for him. [50]

To be able to identify these 'situations' or contexts should be an

important starting point of any analysis of Birtwistle's music. Symmetry as an operational rule provides coherence without necessarily implying unity throughout the structure, i.e. without denying opposition.

The notion of a 'non-symmetrical balance', however, is generally more useful in examining Birtwistle's structures. It could be argued that some sort of approximate symmetry is a false concept in the sense that an object is either symmetrical or it is not. Yet there are many examples in Birtwistle's work of structures which quite clearly have a symmetrical 'background' but whose realisation in the music is compromised or even contradicted as a result of the exigencies of the surface workings of material – even while being contained by the background model. Birtwistle himself has given good reason why these contradictions should be allowed. For instance, the overall structure of Tragoedia (1965) is based on the formal principles of Greek tragedy, the essence of which is, in his own words, 'bilateral symmetry in which concentric layers are grouped outward from a central static pillar [the Parados]'. [51] Yet in practice the structure is not exactly symmetrical: such a structure would be too predictable. For Birtwistle, what matters is the way a work evolves against the expectations set up by the use of a symmetrical model. Various changes have to be made. 'The non-literal symmetry that results from all these changes is crucial, since an exact mirror symmetry, even though motivated earlier in the work, would limit the form unnecessarily to one dimension as the work drew to its close'. [52] But this does not mean that the work becomes unbalanced. Indeed, it is the tension between the model and its realisation that gives the work its dynamism. The structural principle

at work here seems to be a positive one of non-symmetrical balance.

There are many other examples in Birtwistle's work of a symmetrical 'process' in the abstract which is disrupted on the surface of the music i.e. the pitch or rhythmic material or formal ideas are generated by the application of regular rules of symmetry but over which the local concerns of the music take precedence. These range from the large-scale forms of the majority of his works (from miniatures such as Pulse Sampler to the vast structures of the operas) to the kind of control of register and duration through symmetry as illustrated in some of the analyses below (e.g. in individual numbers in Punch and Judy or in the component songs of the Four Songs of Autumn). It is interesting to note that Birtwistle's formal models are often drawn from sources which could also be said to be concerned with non-symmetrical balance: Greek tragedy, medieval motets, Baroque opera and oriental theatre. However, what is important here is that this background notion of symmetry contributes to the establishment of balance in his musical structures; it is, surely, the ways in which disparate or opposed material can be held in some kind of meaningful balance that provides the music with its coherence. If analysts are to attempt to elucidate some of this music's meanings then it should be their responsibility to demonstrate how this balance is achieved. In acknowledging the influence of Klee's concept of non-symmetrical balance on Birtwistle's thinking, it is also possible to admit its usefulness in providing a context for the analysis of his music.

3: 'Gravitational Curve'

The specific relevance in analytical terms of the third section of Klee's Sketchbook to Birtwistle's music is not perhaps as obvious as the discussions of line and dimension found in the first two sections. It is concerned with another aspect of Klee's understanding of nature and discusses the projection of motion above and below the horizontal line. But, more than this, as Moholy-Nagy has observed, it also gives us an insight in to the 'spiritual dynamism' which informs Klee's work. Klee writes that 'there are regions with different laws and new symbols, signifying freer movement and dynamic position' and Moholy-Nagy comments:

With this mere hint at the existence of purely spiritual dynamism, that supercedes the phenomenal world and its earthbound fate, Klee defines his Naturalism as a symbolism of great depth. [53]

Birtwistle never talks about spirituality. This is not to say that he is not concerned with expression, but its nature is something he is not prepared publicly to address or articulate - 'I don't think creative people think about their intuition. You take it for granted you're expressing yourself'. [54] However, he does admit that intuition can only take a composer 'so far'; instinctive ideas and general notions of expressiveness must go hand-in-hand with a conscious method of working. In other words, as has already been seen, ideas have to be contained in some way - the 'sanctity of the context', as Hall puts it. [55] Or this can be viewed the other way round, akin to the way in which Klee presents his ideas and methods in the Sketchbook, i.e. begin with something regular, controlled, and then subvert it in some way (cf.

Hall's 'central organising principle' – see Chapter 1). Birtwistle has called this the 'magic' of his music, 'meaning the element of surprise and transfiguration that perturbs the regular processes of his scores and provides their fascination'. [56] Klee talks of 'loose' and 'rigid' continuity, the tension between the regular and the irregular, between natural, immutable laws (such as the force of gravity) and human will (the desire to escape from that gravitational pull). A similar tension can be found in Birtwistle's work between the inevitability of regular and symmetrical schemes and structures, and the disruptive will of the composer who works against such schemes yet never fully escapes their influence. What is striking about the language Klee adopts is his insistence on a sense of motion: dynamism, rising, falling, plummet, continuity. For Birtwistle, too, his art can never be 'static'; though regular schemes may suggest predictability and, therefore, stasis, they are always opposed by the less predictable and so generate a dynamic tension. Circle coexists with line; the unchanging and ever-present come under the influence of the whimsical.

4: 'Kinetic and Chromatic Energy'

Energy and motion are also the subject-matter of the final section of the Sketchbook. The idea of form as something dynamic is given further credence by the examples Klee provides of inherently unstable objects or forms which achieve a balance in motion: the spinning top, the pendulum, the circle, the spiral and the arrow. Such objects are impelled toward motion, he argues, by the mediation of human thought. [57] It is fascinating how Klee is able to imbue simple and everyday objects with

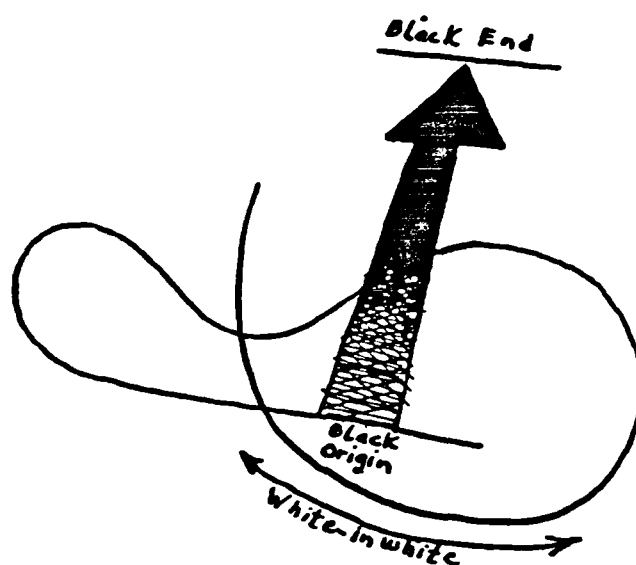
universal meanings; such objects when they appear in his paintings and drawings are placed in a new context, given a significance beyond their exterior appearances. Birtwistle, too, works with very simple materials – a single pitch, a rhythmic cell, a texture – which recur from work to work but which are given a new and deeper meaning by the contexts in which they occur. (This is not, of course, unique to Birtwistle nor, necessarily, derived from Klee although Birtwistle has long held an admiration for the almost childlike simplicity of the ideas that lie behind Klee's works.) The 'dynamic' forms Klee discusses can again provide useful analogies with the ways in which forms are generated in Birtwistle's music, particularly circle and spiral. Klee calls these 'mobile forms'. It has already been seen how the notion of a circle built up from a moving line has clear parallels with Birtwistle's formal procedures e.g. in the way in which recurring smaller groups (circle) are built into larger 'narrative' structures (line) in such works as Tragoedia, Punch and Judy and, more recently, Gawain. But the analogy of the spiral is also useful in some cases, especially in more recent music, as it allows the possibility of circular and linear motion to coexist without necessarily requiring exact repetition (viewing the same object from many different angles), or determined or directed motion (the spiral is not finite and permits motion in two directions, both towards and away from its still centre). Hall has invoked the model of the spiral in general terms in his discussion of such 'labyrinthine' works as Silbury Air and The Mask of Orpheus. [58]

The final pages of the Pedagogical Sketchbook are concerned with colour and the way in which gradations of colours can also generate and organise movement. [59] Analogies with Birtwistle's music are

problematic and, perhaps, unnecessary. His use of instruments, registers and timbres as well as of physical space (the actual physical origination of sounds in performance) is as likely to have been derived from the obvious models of Stravinsky, Varèse, Webern and Messiaen as from a contemplation of Klee's work. Nevertheless, in an analytical context where it is still generally true to say that most writers are concerned primarily with pitch, Klee's insistence on non-directed visual images derived from the careful, structural interplay of colours ('... arrows are superfluous ... the question is no longer: "to move there" but to be "everywhere"...' [60]) provides a useful corrective and parallels Birtwistle's polemical view of the 1960s that many of his works of that time could be rewritten using different notes yet leaving the substance of the music unchanged. [61] In the same way that Klee considers colour in his work to play a crucial structural role, so in Birtwistle one must give instrumentation, register, timbre and space their full structural value alongside pitch and rhythm. In a work like Verses for Ensembles it is obvious that one cannot account fully for the piece without acknowledging the dynamic oppositions of registers and textures which generate the music's energy, and the structural significance of the movement of the players about the platform. Even in more recent pieces like Earth Dances I would argue that our understanding of the multilayered structure is determined as much by the way in which the material is scored as by the material itself. Any analytical account of these works must take such matters into consideration and this would suggest that the application of a theory interested only in the pitch (or even pitch-class) domain can never have exclusive authority.

Fig. 4-4

'Formation of the Black Arrow'



One striking image which occurs at the end of the Sketchbook and which seems to be appropriate to the way in which both Klee's and Birtwistle's structures operate is that of the 'Black Arrow'. (Fig. 4-4) It is both the progression from white to black and the starkness of the appearance of black in the general context of white which defines both movement and structure:

The given white, much-too-much-seen and tiresome white, is noticed by the eye with little sensation; but the contrasting peculiarity of sudden action (black) sharpens the vividness of vision toward the climax or the termination of this action. [62]

As in Birtwistle's music, it is the principle of conflict, opposition, difference, which defines structure and motion, not any musical objects in themselves. The primacy of such polarities must be acknowledged.

As its pedagogical title implies, Klee's Sketchbook is an inductive text suggesting ways of going about bringing a work of art into being (prescription). The analysis of Birtwistle's music is deductive, examining works of art already in existence (description). The two processes are quite distinct and, as can be seen in the Sketchbook, Klee was well aware of the important differences between how an artwork is produced and how it is received. Nevertheless, many interesting and useful parallels can be enumerated between the method of working of both artist and composer and it is possible, I believe, to gain valid and valuable analytical insights from these. By comparing Birtwistle's work with Klee's (in itself a pertinent exercise in that the evidence to support the influence of Klee's thinking on Birtwistle's work is strong - in the composer's own writings as well as in his music) we are

provided with an (appropriately modern) aesthetic context within which it becomes possible to detect and discuss consistent technical procedures across the works of different periods. This is not to suggest that Birtwistle is doing the same thing as Klee, but their shared modernity means that the common ground between their work is clear enough to make analogies meaningful and to suggest relevant analytical strategies. By so doing, we are beginning an analysis of a Birtwistle work from a clearly defined historical and aesthetic perspective.

Reference to the many recurring structural matters discussed in this chapter in the context of Klee's Pedagogical Sketchbook will be made in the following selective analyses of works taken from a number of different periods of Birtwistle's creative life.

NOTES

- 1 Birtwistle in interview in 'Behind the Mask' produced for Channel 4 Television. Quoted in the booklet by Gillian Moore, Harrison Birtwistle (London: Channel 4 Television, 1987), p. 5
- 2 Translated by E Lewis-Isastid as the Preface to Jürg Spiller, ed., Paul Klee: The Thinking Eye [The Notebooks of Paul Klee] (London: Perry Lund, 1961)
- 3 Klee, first printed in Kasimir Edschmid, ed., Tribüne der Kunst und Zeit, Vol. XIII (Berlin: Erich Reiss, 1920). Reproduced as 'Creative Credo' in Spiller, op. cit., p. 76
- 4 See 'Klee and Music' in Norbert Lynton, Klee (London: Hamlyn, 2nd ed. 1975), p. 89. For a more detailed discussion, see Andrew Kagan, Paul Klee/Art and Music (Ithaca: Cornell University Press, 1983). Klee believed 'in Goethe's assertion that "colour and sound do not admit of being directly compared ... but both are referable to a universal formula, both are deriveable, although each for itself, from this higher law". [Goethe's Colour Theory] Theoretical parallels between painting and music became crucial to Klee, but only to the extent that they could help him to establish useful models'. [Kagan, pp. 38-9]
- 5 Lionel Feiniger in Ludwig Grote, ed., Erinnerungen an Paul Klee (Munich: Prestel Verlag, 1959), quoted in Lynton, loc. cit.
- 6 Paul Klee, Pedagogical Sketchbook, tr. and with an introduction by Sibyl Moholy-Nagy (London: Faber & Faber, 1953), p. 16
- 7 An idea articulated by Lynton, loc. cit.
- 8 See Spiller, op. cit., especially pp. 267-97
- 9 Ibid., pp. 285-7
- 10 After Klee's The Twittering Machine (1922). 'The piece is by way of a homage to Paul Klee and the title is a title he could have invented'. Birtwistle in a programme note on the work, quoted in Hall, Harrison Birtwistle, p. 177
- 11 Printed in Hall, op. cit., pp. 143-53
- 12 See ibid., p. 107
- 13 See, for instance, Birtwistle's conversation with Paul Griffiths in New Sounds, New Personalities. British Composers of the 1980s

- (London: Faber Music, 1985), pp. 186-94
- 14 The Music of Edgard Varèse, p. xix
- 15 Quoted in *ibid.* First appeared in 'Jerom' s'en va-t'en guerre',
tr. Louise Varèse, The Sackbut, No. 4, December 1923, p. 147
- 16 Robert D. Morris, Composition with Pitch-Classes (New Haven: Yale
University Press, 1987), for example, is an exception which
demonstrates the possibilities of the creative use of pc set
theory.
- 17 Birtwistle in conversation at a pre-Prom talk, Royal College of
Music, London, 16 August 1982
- 18 Griffiths, *op. cit.*, p. 192
- 19 'I don't like inventing systems not generated from the moment that
I actually require them. If I arrive at a context where a
procedure is required, I will always invent or re-invent a
procedure. I will never look back to see how I did it before.
That would be too academic'. Quoted in Hall, *op. cit.*, p. 151
- 20 Quoted in *ibid.*, p. 150
- 21 For a fascinating account of the influence of the Cubists on Klee
see Jim M. Jordan, Paul Klee and Cubism (Princeton: Princeton
University Press, 1984)
- 22 Sibyl Moholy-Nagy, Introduction to Pedagogical Sketchbook, p. 9
- 23 Hall, *op. cit.*, p. 26
- 24 Klee, Pedagogical Sketchbook, p. 16. All the following references
to Klee are from this text, unless otherwise specified
- 25 Programme note on the work by Birtwistle, quoted in Hall, *op.*
cit., p. 175
- 26 See, for instance, Rhian Samuel's essay, 'Gawain's Musical
Journey' in the Royal Opera House programme booklet (1991)
- 27 Klee, pp. 18-19
- 28 'Passive angular lines and passive circular lines become active as
planar constituents' - Klee, p. 19
- 29 Klee, pp. 22-5
- 30 The Mask of Orpheus, libretto (London: Universal Edition, 1986),
p. 6
- 31 In this context, one is also made to recall Klee's own painting of
a series of arches, Revolution of the Viaducts.

- 32 Quoted in Hall, op. cit., p. 151
- 33 Klee, pp. 26-32
- 34 Klee, Paths of the Study of Nature [Yearbook of the Staatliche Bauhaus, Weimar, 1919-1923], quoted by Sibyl Moholy-Nagy in her Introduction to Pedagogical Sketchbook, p. 7
- 35 Moholy-Nagy, loc. cit.
- 36 The parallels with a work such as Klee's pastel painting, Individualised Measurements of Strata (1930), are unmistakable. As Norbert Lynton comments, it is not any representation of nature that is important in this picture, nor yet Klee's impressions of Egypt which he had been visiting; 'What matters is the subtlety and the rareness of these particular colour confrontations and the effectiveness of the rhythmic grouping of different shapes and sizes of colour areas'. [Lynton, op. cit., p. 61] Compare these comments with Andrew Clements's description of Earth Dances: 'Birtwistle refers to these independent layers as "strata" ... The shifting relationships of the strata generate the prodigious surface energy - the Earth "dances"'. [Programme note on the work in the BBC Birtwistle Festival programme (London: BBC Concert Publications, 1988), p. 53]
- 37 See Griffiths, op. cit., p. 186
- 38 Gillian Moore, op. cit., reads great significance into the influence of the Lancastrian landscape on Birtwistle's work. Though the context of his upbringing will inevitably have coloured his thinking, I nevertheless find it hard to read anything more into this than a general influence on his choice of familiar 'Northern' (and, perhaps, rather 'gritty') material as subject-matter for his dramatic works.
- 39 Klee, p. 33
- 40 Libretto, p. 48
- 41 '... the work is not linear, with parallel strands of lyrics, music, and visual events ... Sequentially the words do not determine the play. A different dramatic interpretation based on the music and words will be incoherent. This in contrast with most masques ... and operas where the action, words and music all combine at the same point to emphasise the story'. Libretto, p. 2

- 42 Klee, pp. 35-41
- 43 One might wish to draw certain parallels between perspective, the convention which had governed the visual arts in Europe since the Renaissance, and tonality, which had served a similar function for music. However, though both perspective and tonality can be understood to give a work unity by providing a single point of 'focus' to which everything else is related, the comparison is only a very general one and is likely to be misleading. Ultimately, the two conventions operate in very different ways.
- 44 Jürg Spiller, ed., op. cit., p. 140
- 45 Quoted by Andrew Clements in a programme note on the work, op. cit., p. 52
- 46 Klee, p. 42
- 47 Klee, pp. 43-5
- 48 Klee, p. 10
- 49 Hall, op. cit., p. 21
- 50 Stephen Walsh, review of Hall, op. cit., in Soundings, No. 12, pp. 75-8
- 51 Birtwistle in a note on the work to accompany the Argo recording (ZRG 759: 1967)
- 52 Birtwistle, *ibid.*
- 53 Klee, pp. 47-9. Sibyl Moholy-Nagy's comments are to be found in the Introduction to Klee, pp. 10-11
- 54 Quoted in Hall, op. cit., p. 147
- 55 See Michael Hall, 'The Sanctity of the Context', Musical Times, Vol. 129, January 1988, pp. 14-16
- 56 Andrew Clements, 'Harrison Birtwistle: a Progress Report at 50', Musical Times, Vol. 125, March 1984, p. 139
- 57 Klee, pp. 51-6
- 58 Hall, Harrison Birtwistle, pp. 109-10
- 59 Klee, pp. 57-61
- 60 Klee, p. 61
- 61 See Michael Nyman, 'Two New Works by Birtwistle', Tempo, No. 88, 1969, pp. 47-50
- 62 Klee, p. 57

BL N AG

CHAPTER 5

'Refrains and Choruses'

I wrote it completely off the top of my head. I can't justify a single note. I don't know why I was doing it or why it is like it is. [1]

Only two writers have made any analytical observations about Refrains and Choruses and one of these is, unusually, the composer himself. [2] Neither piece of writing is at all substantial; each addresses the form of the work but even on this the two cannot agree. Michael Hall sees the piece as being constructed in seven sections which (though he does not say so specifically) presumably correspond with the double-bar divisions in the score, i.e. according to fairly obvious surface textural criteria. Birtwistle, on the other hand, claims his piece is built of only five sections and goes on to suggest that the overall form of the piece evolves according to a straightforward process connecting one section with the next:

Its compositional scheme is simple, having five sections, each section consisting of two elements: a constant one called 'chorus', and a recurring one called 'refrain'. The refrain, through repetition, becomes a predominant entity, and so [becomes] the chorus material of the following section. [2]

It is typical of Birtwistle's playful Northern Irony that he should make claims of simplicity for his musical designs – they are rarely so. Furthermore, the example he gives to support his claim is the most obvious one which occurs at the end of the work. How this process works

Fig. 5-1

Sectional Divisions

<u>Bars</u>	<u>Section</u>		<u>Characterising textural features</u>
	<u>Birt</u>	<u>Hall</u>	
1-20	I	I	Intervallic expansion from initial pitch C; 2-voice symmetry
21-34	II	II	'Melody' in upper voices (fl/ob/cl) & 'bass' line in lower voices (hn/bsn); introduces trichord 'x' [B,D,Eb] (3-3)
35-44		III	Single line passed between voices, decorated or with interjections
45-55	III	IV	Trichord 'x' ; trills; a more even contrapuntal texture
56-72		V	More homophonic (using 'x'); trills; moving towards a single pitch D
73-121	IV	VI	Horn melody within context of sustained symmetrical chord leading to 'wedge' centred on E interrupted by pentachord 'z' [A,Bb,C#,D,Eb] (5-6)
122-154	V	VII	Widely-spaced chord 'z' connected by 3-voice motion. Eventually the chord contracts, separated by clearly melodic motion

elsewhere in the piece is far less clear – indeed, even the five sections, and the refrains and choruses within them, are much harder to identify than one might at first suppose. Hall's is by far the simpler (though less satisfactory) solution. For purposes of reference I have tabulated in Fig. 5-1 the sections as given by Hall and what I believe to be Birtwistle's structural divisions.

Immediately it is clear that, simply in terms of the proportions of the sections, Birtwistle's scheme is neater:

HALL:	20	-	14	-	10	-	11	-	17	-	49	-	33
BIRTWISTLE:	20	-	24	-	28	-	49	-	33				

There is an obvious movement towards and then away from the climax of the work (Birtwistle's section IV) which Hall's smaller sections do not make clear (though he agrees that the climax occurs towards the end of his section VI [3]).

But what evidence is there for the process hinted at by Birtwistle? As I have already suggested and as shall be discussed in more detail below, the most obvious 'connection' is between the final two sections [4] where a recurring idea in section IV, the refrain, appears to become the constant element of the following final section. The substance of section IV (beginning at b. 89) consists of a process of opening out from a central pitch, E, to the climax at the end of the section/beginning of the next (b. 122). The E remains ever-present and so can be heard as the constant element, the chorus. But this 'line' is periodically interrupted by a vertical sonority in all five voices which appears, on the surface, to have little to do with the music which surrounds it (Ex. 5-1). This chord's differently registered appearances are at bs 100, 108, 116 & 122, i.e. they are fairly evenly spaced

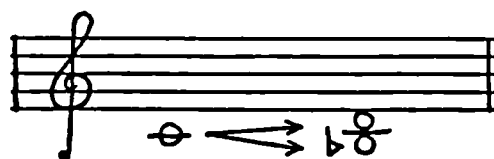
Ex. 5-1

Birtwistle, Refrains and Choruses, b. 140



Ex. 5-2

Birtwistle, Refrains and Choruses, opening and closing pitches



throughout the section. Whether or not the chord becomes predominant is a matter for discussion but certainly, by the very fact of its repetition, it is an important recurring element of the section – a refrain. In the final section, the central E disappears but the pentachord (or elements of it) remain. Towards the end of the section it sets up its own (linear?) process of registral contraction where it moves from its widest possible arrangement (b. 131) to the closest cluster (b. 153) to end the work. So it now seems to have become the constant feature of the section. In between these chords is to be found material which is derived from a single twelve-note collection and which has itself been generated by the kind of symmetrical procedures found elsewhere in the work. Yet, as Birtwistle himself seems to admit [5], there is no role reversal here. Though the identities of refrain and chorus appear to have been modified, the refrain remains such in both sections, i.e. it cannot be said that the pentachord refrain in section IV becomes the chorus of section V. Indeed, as we shall see, it is possible to identify elements of this refrain which recur throughout the entire work across the major structural divisions. This would seem to suggest, then, that Birtwistle's comments need to be interpreted more generally. Neither the procession from one section to the next nor the role of refrain and chorus is as clearly defined as either the composer's comments or the work's title implies.

Refrains and Choruses is virtually unique among Birtwistle's earlier works in that it is 'through composed': it lacks the large-scale formal repetitions found in many of his works of the 1960s. This could be one of the important reasons why Birtwistle chose to emphasise the linear or connecting processes in the music at the expense of whatever

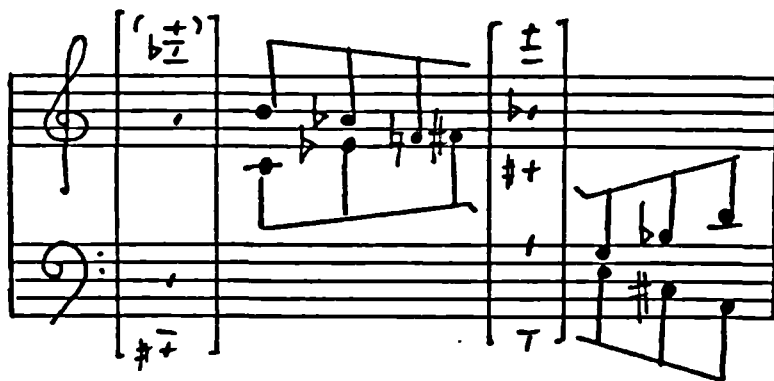
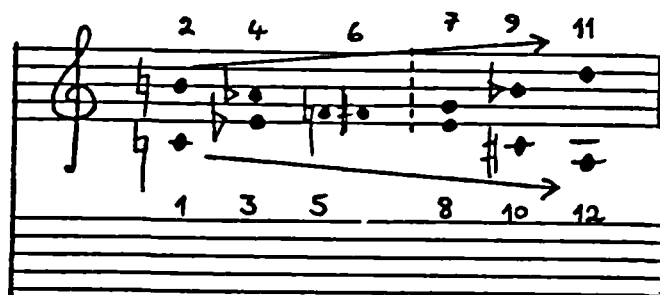
else might be discovered to contradict this. A suggestion of this long-term connectedness is given, for example, by the way in which a link is implied between the first and last gestures of the piece. The work begins with a middle C for solo horn and ends by picking out the Bb and D on horn and clarinet which surround the C symmetrically (Ex. 5-2). By stressing the importance of the manner in which one section is connected with its successor, Birtwistle is further pointing to this large-scale linear process, how the beginning is linked with the end. This is not to suggest for a moment that the work is directed in any tonal sense; connectedness on every level of structure is not to be found, though continuity is an important component of the work's structural identity. As for many composers this century, Birtwistle's understanding of form here has more to do with process than with any structural 'ready-mades'.

[6]

What, then, is the context for this apparent linear development? How is musical material generated in the first instance and how is it contained and shaped? One of the major constructive principles in the work would appear to be that of symmetry which controls local pitch configurations, registral placement and longer-term processes - we have already seen one example with regard to the initial and final gestures of the work. The chorus material of the final part of section V discussed above (from b. 131) has its origins in a simple symmetrical pattern. Beginning with a major 7th between flute and horn, a two-voice line emerges which presents all 12 notes of the chromatic scale only once and whose lines mirror one another (see Ex. 5-3). However, half way through this symmetrical unfolding there is a statement of the refrain chord, after which the lines are transferred down an octave to

Ex. 5-3

Birtwistle, Refrains and Choruses, bs 132-4



clarinet and bassoon. The symmetry is therefore exact in the abstract but its realisation in the music is distorted as a result of octave transfers. This particular ordering of the twelve notes then becomes the source for all the rest of the chorus material. The two-voice texture in rhythmic unison is maintained, as is the intervallic mirroring (but now only approximately – as contrary motion) until b. 145 when, in keeping with the process of contraction in the refrain, a single voice emerges. Up to this point the pitches are taken in linear fashion, though not always according to a strict ordering (see Ex. 5-4). Occasionally, there seem to be 'wrong' notes, e.g. the flute B in b. 139 should be a Bb; the bassoon D at the end of b. 140 should be a B. These may be printing errors, they may be inadvertencies on the part of the composer, or they may be deliberate compositional disruptions. Whatever their origin, they are allowed to stand: though Birtwistle claims he does not tolerate mistakes, he nevertheless seems to believe that such lacunae are a part of, rather than a distraction from, the end result – a decidedly modern stance. [7]

The appearance of the solo clarinet line initiates a disruption of the pattern: 'rogue' notes enter and are emphasised, principally the Ab in bs 149-50 and the final D of bs 152-4; and the pitch ordering is retrograded (Ex. 5-5). All this signals a 'closing in', a limiting of means, just as the refrain is contracting and the frequency of its statements are increasing to indicate the inevitable move towards the work's conclusion. There is no necessary connection between refrain and chorus here. Though both, in one sense, have 'static' pitch material which is being 'processed' (the chorus in terms of linear rotations, the refrain in terms of register), that material always remains quite

Ex. 5-4

Birtwistle, Refrains and Choruses, bs 132-9

132

4 8 9

5 6 7

2

3

136

4 1 2

10 3

1 2

3 5 6 7 10 11 3

2 4 8 9 12 1 2

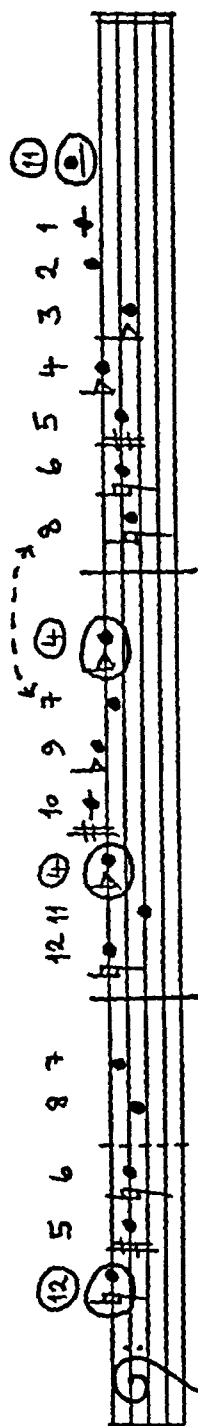
B \flat A \flat E 7 B \flat A 7 C 7 B 7 etc.

E \flat F \sharp F 7 G 7 C \sharp D 7 E \flat

3 5 6 7 10 11 3

Ex. 5-5

Birtwistle, Refrains and Choruses, bs 143-54



clearly distinct: one restricted to five unchanging vertical pitch classes, the other employing the entire chromatic horizontally. Yet, in one obvious way, the chorus is contained by the refrain – that is, it generally operates within the registral confines set by the extremes of the refrain: thus, as the vertical space occupied by the refrain contracts, so does that of the chorus.

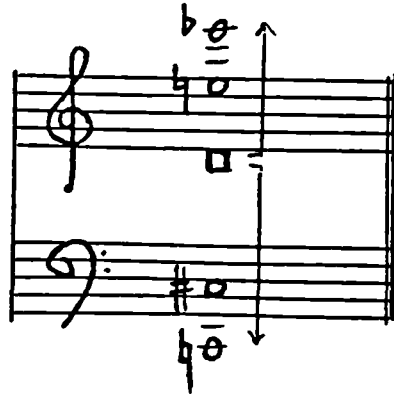
The formal workings of the final 23 bars of the piece begin to become clear. We are presented here with one coherent formal intention that is articulated in more than one way simultaneously. This might be expressed as a move from a music which is widely spaced to one which is confined and contained and this is variously achieved by the contraction of the refrain pentachord (which, in fact, appears to punctuate the overall process with the general increasing frequency of its appearances), the corresponding contraction of the registral space of the chorus, the refining of the chorus from two-part counterpoint to a single voice, and the operation of the same kind of rotational process but on mutually exclusive pitch material. The music is thus 'directed' towards its conclusion and yet refrain and chorus remain opposed, held in a meaningful balance by this process. There might appear to be some kind of resolution or synthesis at the end by the way in which the last chorus note on the clarinet is taken into the final statement of the refrain chord. However, this is not the case: although the D is injected into the chorus line, it can be seen in Ex. 5-5 that it does not really belong. The opposition is, Stravinsky-like, controlled or suspended, not removed. The two kinds of music here are expressions of the same idea but cannot ultimately be seen to be subsumed into some (non-existent) background unity.

There is thus a clearly directed intention to the last 23 bars of the work. If it is true, then, that this process continues throughout the work, what evidence is there to support its existence before this closing passage? Quite clearly, the closing in of the texture begins from the moment of climax at b. 122 (the loudest moment in the work) where statements of the refrain chord, or variants of it, are interspersed with homophonic 'chorus' writing in three parts (see bs 122-31). And before the 'wedge' passage already referred to (bs 89-122), versions of the five-note refrain chord are connected by a solo horn line (gesturally related to the chorus material from b. 131) and four-part counterpoint in the other voices (see bs 73-82). This points to larger-scale gestural/textural connections which extend across at least half the work. Within these sections are to be found a similar kind of relationship between vertical and horizontal material, between refrain and chorus, as already elucidated in the final 23 bars. Let us examine first the passage at bs 73-89.

The widely-spaced refrain chord which begins this section (section IV) is an immediate consequence of the preceding section (another linear connection) which ended by exploring a single pitch centre, D, in a series of cadenzas for clarinet, oboe and bassoon (see b. 72). This proliferates in b. 73 into a chord built entirely of (registrally displaced) semitones symmetrically centred on the D (Ex. 5-6). Four of these pitches are then sustained to allow the horn, in a protagonistic gesture typical of Birtwistle ('fff possibile!'), to present a melodic line which exposes an eleven-note row before returning to the sustained C₂ from which it emerged (Ex. 5-7a). As with the chorus material in bs 131-end, the horn's subsequent statements are derived from this row by

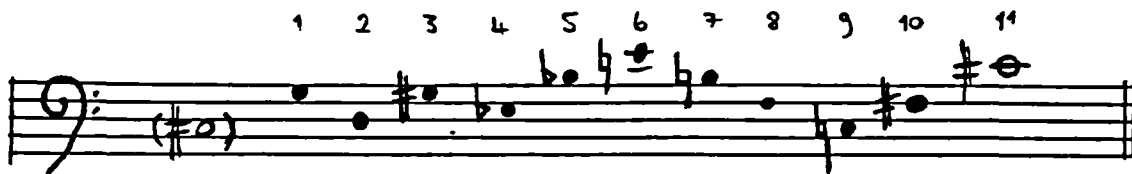
Ex. 5-5

Birtwistle, Refrains and Choruses, b. 73



Ex. 5-7a

Birtwistle, Refrains and Choruses, horn, bs 73-5



Ex. 5-7b

Birtwistle, Refrains and Choruses, horn, bs 77-89



simple pitch rotations: firstly repetition, then, after a brief interruption, retrograde (Ex. 5-7b). However, on closer examination, it can be seen that this horn line is not so different in kind from the refrain chord as one might at first suspect. If its pitch-classes are represented in their closest arrangement it becomes immediately apparent that the line is simply constructed from two interlocking chromatic segments, i.e. the same intervallic content as the refrain chord (Ex. 5-8a). The only pitch-class missing from this eleven-note sequence is the A. The reason for this is to be found if the actual pitches of the entire horn line from bs 73-89 are arranged vertically, when it becomes clear that they fill the total chromatic between their registral extremes - with the exception of this A which is the line's absent symmetrical centre (Ex. 5-8b). Thus, as with the refrain, its pitches are arranged symmetrically in space. Although its centre is different from that of the refrain, it is governed by the same organising principle. It cannot be said that the two ideas are 'organically unified' because their centres are in opposition but they nevertheless hold one another in balance as they operate in related ways.

As for the refrain, it is first sustained to allow the horn melody to be heard. It is next sustained at b. 77 in a different form but for the same reason, and again at b. 82 (see Ex. 5-9). Although these chords are obviously gesturally related, there appears to be little to connect them harmonically: the first, as we have seen, is a chromatic collection [C,C \sharp ,D,Eb,E] (pc set 5-1); the second has a chromatic collection (3-1) embedded in a 4-note set (4-5) [C,C \sharp ,D,F \sharp]; and the third is a different 4-note set built of a pair of semitones (4-9)

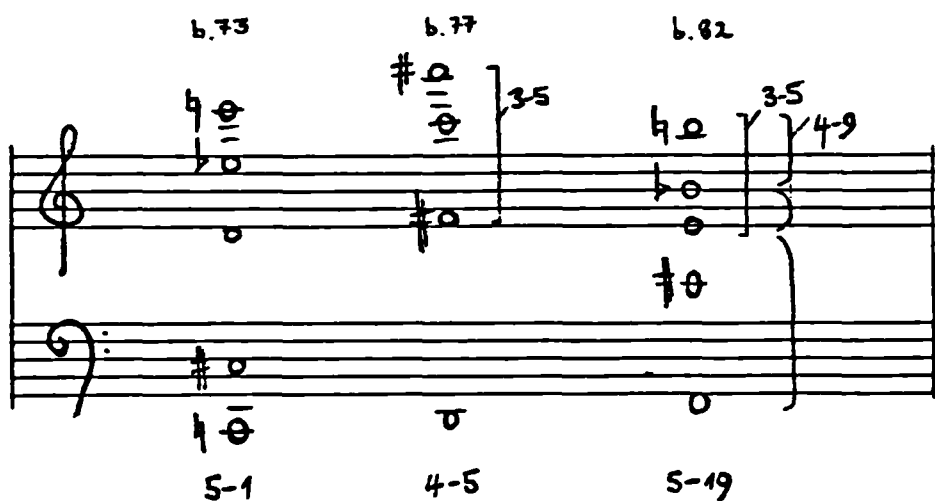
Ex. 5-3

Birtwistle, Refrains and Choruses, horn, bs 77-89



Ex. 5-9

Birtwistle, Refrains and Choruses, ensemble, bs 73, 77 & 82



[E,F,Bb,B]. So each chord contains at least two semitones but this is not, in itself, adequate evidence to support a claim of relatedness. However, embedded in the last two chords is another 3-note collection which appears to have a wider significance, namely set 3-5 which is here represented on each occasion in the upper three voices of the texture (flute, oboe, clarinet), first as [C#,F#,C] then as [B,Bb,E]. On the larger scale it could be seen as a subset of the refrain chord at the end of the work, set 5-Z18, which again establishes some kind of relatedness but only in a very general harmonic sense (set 3-5 is in a Kh relationship with 24 of the 38 possible 5-note sets). It is locally that this chord is of primary interest, and this is in the way in which it connects with the contrapuntal activity between the refrain chords (Ex. 5-10). On closer examination, it can be seen that this counterpoint generates a series of mostly three-voice verticalities and that the majority of these (18 out of 32) are forms of set 3-5. Of the rest, there are to be found statements of lc 5 (a constituent interval of 3-5), and other sets of cardinality 3, all of which contain at least one representative of lc 5: 3-11, a number of statements of 3-9 (whose interval vector of [010020] discloses a predominance of lc 5), 3-7 and 3-4 (maximally similar to 3-5, i.e. displaying relation R_1). There are also two 4-note sets: 4-13, which has 3-5 as a subset, and 4-22.

What these set statistics show (unusually for Birtwistle) is a high degree of harmonic consistency in this passage. Such procedures operate below the immediate surface of the music as the displaced nature of the writing for individual voices tends to distract one's attention away from vertical correspondences (coming as this writing does between statements of the refrain chord). Also, the important (vertical)

Birtwistle, Refrains and Choruses, bs 73-82

[illegible]

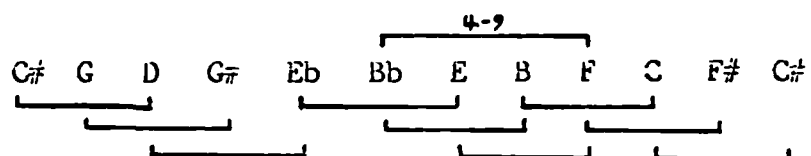
harmonic intervals, i.e. lcs 1 and 5, are not given any undue melodic prominence. There is no obvious relationship between the vertical and the horizontal here and so an interesting tension between the two is established. [8]

However, this is not altogether true. In one very obvious way, the vertical material is directly derived from the horizontal writing – that of the seemingly independent horn line. A closer look at the eleven-note row exposed by the horn reveals that it is built (initially) of two ascending, interlocking chromatic lines (with the exception, as already discussed, of the absent central A) (Ex. 5-8a). Furthermore, the entire line can be viewed as a sequence of overlapping statements of set 3-5 (Ex. 5-11). And, at the point where the chromatic sequence is momentarily disrupted owing to the absent A, set 4-9 can be seen to be embedded in the line using the same pcs as in the last of the three refrain chords, [E,F,Bb,B]. Not only, then, are vertical and horizontal material here harmonically related in the abstract, but also the ensemble material is explicitly represented in the horn line: the pc content of every vertical appearance of 3-5 bar one (marked by [*] in Ex. 5-10) has already been exposed melodically by the horn.

Some interesting and important questions are thus raised about the nature of the 'unity' of the material employed in this passage. Like Schoenberg's twelve-note row, the eleven-note row here would appear to provide both unity and comprehensibility in all musical dimensions to the extent that all pitch material can be seen to be derived from it. In a very general sense this is true, although some of the connections made by the sole virtue of the presence of lc 1 are neither specific nor, in themselves, pertinent. The oppositions between refrain and

Ex. 5-11

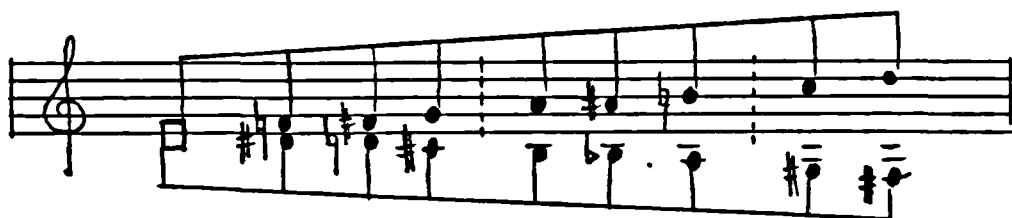
Birtwistle, Refrains and Choruses, horn, bs 73-5



all forms of 3-5 [100011]

Ex. 5-12

Birtwistle, Refrains and Choruses, 'wedge', bs 89 ff



chorus of texture and of centre of symmetrical focus still hold and are in no way diminished by the demonstrable connections between them. In practice, the 'row' remains a general source of pitch-class material without in any way determining order, register, or, indeed, the nature of other only vaguely related chords and intervals. There is a tension here between the specific and the non-specific, between the ordered and the unordered. The framework within which the music operates (that is, the general principles by which material is generated) is clear and contained; the manner of its composing out is not.

The process at work in the rest of section IV has already been outlined, i.e. the symmetrical opening out from a single pitch centre periodically interrupted by the refrain chord. A straight-forward transition connects it with the preceding passage. The horn completes its cycles of rotations, coming to rest on the E with which the next section begins but overlapping with it (b. 88). Its line undergoes a gradual softening of dynamic from fff to pp and is no longer grouped in eighths but in progressively smaller units. The texture thins suddenly at the end of b. 82, leaving just the flute to accompany the horn with semitonal, trill-like gestures circling round E, the 'centre-to-be' (though the falling fifth B-E across bs 86-7 seems to anticipate the cadential rising fourth which brings the horn line to a close). In fact, the flute line here appears almost to ignore the previous 10 bars from which it emerges and begins back in its lowest register with the very D that had acted as the focus for section III. Its rising chromatic line would seem to connect section III with the body of section IV. The trills, too, make a gestural connection further back with the latter part of section II and section III.

The wedge itself is perhaps not quite as simple as one might at first suspect; indeed, it is not even complete in the sense that certain notes of the chromatic are omitted – though it always remains symmetrical (see Ex. 5-12). The E remains omnipresent but the course of the wedge pattern becomes slowly obscured, so much so that its later stages are almost completely obliterated in a welter of free counterpoint. The general course of the music mirrors this moving away from the centre in that it proceeds from a simple, quiet beginning (b. 89) and builds in complexity and dynamic, the registral space opening all the time, to the climax at b. 122. In this sense, if the E and the wedge process are to be understood as the chorus (according to Birtwistle's definition), i.e. the constant feature, and the recurring chord as the refrain, then the developing obscuration has to be seen to belong to the chorus: not only does its growing complexity reflect the parent process but also its gestures seem to act as some kind of decoration of that linear development.

These interjectional gestures begin immediately with leaping single grace-note figurations (bs 89 ff.) becoming three- and five-note gestures (bs 93 ff.), six-note figures (bs 99 ff.), seven notes (bs 104 ff.), and so on. What is important is that each gesture either begins on or ends with (or both) one of the pitches of the wedge or the E, further supporting the claim for their belonging to the chorus. Many of these figurations are related, such as the wide leaping figure (e.g. ob, b. 93; cl, b. 95; fl, b. 107; etc.) or the figure which decorates its starting/finishing note by constantly returning to it (e.g. fl, bs 99 & 108-9; bsn, bs 108-9; etc.). Furthermore, these motifs make broader references across the work where similar gestures are to be

found. For instance, leaping motifs make up the substance of the chorus's contrapuntal writing in bs 73-82 while there is even a foretaste of the 'returning' figure of bs 108-9 in the bassoon at b. 79; grace-note decorations are to be found as early as in the clarinet line at b. 4 and are a characteristic feature of the cadenzas in b. 72. There are many other motivic references, some of which are identified below. By pinpointing such connections, I am not trying to suggest that the entire work is motivically unified in the way one might talk about a Beethoven piano sonata [9] or the Brahms Rhapsodies. Far from it. Motivic references across a work such as this establish connectedness at one level without denying the possibilities of other procedures working simultaneously with - or even against - them, and such is the way Birtwistle operates. Musical 'objets trouvés' recur periodically in, for example, The Triumph of Time where a three-note figure for amplified saxophone is repeated seven times and a cor anglais melody makes three significant appearances [10]; or Silbury Air in the context of which Birtwistle has spoken of 'objects' which are subjected to 'a vigorous invented logic via modes of juxtaposition, modes of repetition, modes of change'. [11] Birtwistle does not create collages (as, perhaps, an innocent reading of his own writings might suggest) but it is important to emphasise that any motivic connections one makes are purely referential and never functional in any directed structural (tonal) sense.

If the structure of section IV is relatively clear, then the very opening of the work is less so although, as perhaps one would expect, it appears to introduce a variety of compositional procedures which are

taken up and explored more fully later in the work. The horn takes the lead here - as it does elsewhere where it has an important independent role to play. However, I feel that, in this instance, Hall overstates its role as 'protagonist' [12]. I suspect he is guilty of projecting on to Refrains and Choruses the kind of writing to be found in subsequent, more confrontational works such as Tragoedia and Verses for Ensembles where the horn certainly does act as protagonist. It is simply not true to say that 'the horn's capriciousness becomes more and more assertive' because it is frequently as much a part of the group as any other instrument - although it is, admittedly, rather wayward during the passage between bs 73-89. Hall further claims that the turning point of the structure/drama occurs at the climax of the piece (b. 122) where the horn is virtually silenced by the other instruments and 'thereafter ... becomes absorbed into the chorus'. But this too is not true as the horn has participated as an equal member of the musical body since at least b. 89 when its melody elided with the central E. The horn sets the ball rolling, but at the start it is neither possible to identify a clear-cut dramatic polarisation of horn against ensemble, nor to be certain about what is refrain and what is chorus.

Ex. 5-13 gives an indication of how the opening material is derived from the initial reiterated horn C. It is a free procedure where one idea leads to the next, and is as much concerned with (modernistically) filling out the musical space as it is with the operation of any explicit generative process. After embellishing the horn pitch with its semitonal upper neighbour, Db, the clarinet takes the line down to the instrument's lowest note, Eb, by a simple process of interval expansion (semitone - whole tone - minor 3rd - major 3rd),

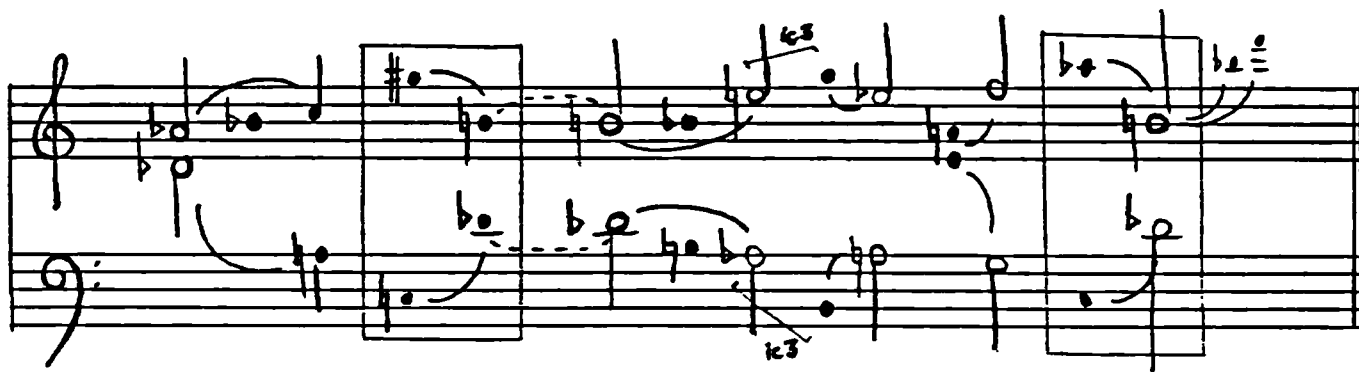
Ex. 5-13

Birtwistle, Refrains and Choruses, bs 1-11



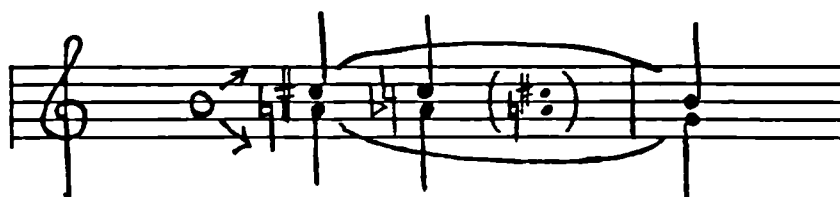
Ex. 5-14

Birtwistle, Refrains and Choruses, bs 12-16



Ex. 5-15

Birtwistle, Refrains and Choruses, b. 20



freely doubled nearly two octaves higher by the flute. [13] Their final two pitches (Eb and Gb) are sustained and decorated by oboe and bassoon in a manner to be exploited later in the work (see discussion of section IV above): the oboe by taking the Gb as its starting-point and falling to a Bb – a kind of echo of the opening falling 6th motion – and the bassoon by trilling on the Eb to its upper semitonal neighbour – the same embellishment as undertaken by the clarinet in b. 4. The horn also re-enters, now reiterating a D as a closing gesture for the first sub-section (signalled by silence and a pause in b. 11). Note too how these 'decorative' bars (8–11) are marked by an *accelerando* and a *rallentando*.

The next sub-section resumes the initial tempo and the proceedings are initiated on this occasion by the bassoon which picks up the Db from the clarinet in b. 4. The horn then enters for a third time, again to rhythmicise a single pitch – now an Ab. This is the last horn entry of this kind before it involves itself more directly with the rest of the ensemble (b. 16). The oboe picks up the Bb it had first introduced in b. 9 and the ensuing contrapuntal passage (bs 12–20) exposes another operational principle crucial to the rest of the work, namely the proliferation of material by means of symmetry (see Ex. 5–14). The evidence for such symmetry is, in fact, obvious on the surface of the music whose essentially two-voice counterpoint displays a simple kind of contrary motion. Even when the symmetrical mirroring breaks down (which in itself is never quite exact or regular), it continues informally with the contrary movement between clarinet and bassoon (bs 17–19). There is little repetition, though the end of one kind of symmetrical writing in b. 17 is signalled here by the exact repeat, by clarinet and horn, of a two-note oboe and bassoon gesture from the very end of b. 14 (also

marked in Ex. 5-14). Finally, the oboe ends section I by sustaining a high B (beginning at b. 18), a pitch-class which has already been highlighted by grace-note decorations in the flute in b. 17, and which provides a link with the next section. The end of the section is again signalled by an *accelerando* and a pause. In b. 20 the flute again appears to decorate the sustained B, now by straddling it symmetrically (in the abstract – see Ex. 5-15) and then initiating a chromatic descent in major thirds which is continued by the oboe when it falls from its B at the start of section II.

Sections II and III are not discussed in detail here because they connect with the rest of the music in obvious ways. For example, a similar kind of symmetrical counterpoint to that in section I is in evidence in section II; certain important harmonic configurations begin to emerge, e.g. the form of 5-6 which concludes the work (b. 35); and the opposition between the vertical (refrain) and the linear (chorus) gradually becomes a more important part of the musical structure.

The overall form of Refrains and Choruses, then, cannot be discussed in terms of any given formal patterns. It is a through-composed structure where one section generates the next and where the beginning is, in an abstract sense, connected to the end. Though, at first, each section of the work may appear very different, each explores aspects of the same structural issues – essentially, different ways of opposing the regular and the irregular, the predictable and the unpredictable, within the context of relatively uniform intervallic/motivic material and principles of symmetry. In Birtwistle's terms, this opposition is

expressed as notions of refrain (regular) and chorus (irregular) whose identities (and differentiation) become more and more clearly articulated as the work proceeds. However, because the nature of the oppositions do not remain constant throughout the work, so the analytical methods required to elucidate them must be flexible enough to respond. For example, the work's harmony cannot be fully accounted for either in terms of symmetry or pc set theory; both are of value but it is the ways in which these systems are balanced that is of greater significance. Even when certain aspects of the music do not 'fit' in relation to any specific analytical method, they are given meaning, are made to belong to a coherent whole, when considered alongside and in opposition to those more regular elements which do fit. The piece thus defines its own rules.

NOTES

- 1 Birtwistle, quoted by Huib Emmer in a liner note for the CD recording of Refrains and Choruses (Amsterdam: Etcetera, 1992), KTC 1130
- 2 Michael Hall, Harrison Birtwistle, and Birtwistle quoted in Hall, *ibid.*, p. 173
- 3 Hall, *op. cit.*, p. 25
- 4 Henceforth sectional divisions refer to Birtwistle's scheme of five sections unless otherwise specified.
- 5 Birtwistle, in Hall, *op. cit.*, p. 173: 'In the final section, the two roles become modified. The chorus, as a voice, becomes dimmer ... and the refrain ... becomes closer'.
- 6 Take, for example, Varèse's oft-quoted assertion that his compositions were 'a melodic totality', flowing 'as a river flows'. Form he spoke of as 'the result of a process' rather than as 'a mould to be filled'. See 'The Liberation of Sound' in Elliott Schwarz and Barney Childs, eds., Contemporary Composers on Contemporary Music (New York: Holt, Reinhart and Winston, 1967)
- 7 'When mistakes occur ... It's the result of a memory lapse, my own memory lapse. I don't like inventing systems not generated from the moment that I actually require them. If I arrive at a context where a procedure is required, I will always invent or re-invent a procedure. I will never look back to see how I did it before. That would be too academic'. Birtwistle quoted in Hall, *op. cit.*, p. 151
- 8 This is a reversal of the situation one generally expects in atonal music where vertical harmony would often appear to be a casual consequence of horizontal contrapuntal activity.
- 9 This, despite Hall's somewhat glib and unsupported assertion that the work 'resembles ... a Beethovenian structure in that at the start there is a rhythmic followed by a melodic motif ... both of which develop ...' [*ibid.*, p. 11]
- 10 In a programme note on The Triumph of Time, Birtwistle wrote about 'a piece of music as the sum of musical objects, unrelated to each other, apart from one's decision to juxtapose them in space and

time'. Ibid., p. 175.

11 Ibid., p. 177

12 See his discussion in *ibid.*, pp. 10–15

13 The flute Cbb in b. 6 of the published score (U.E. 12931 L) is obviously an error as it creates an octave with the clarinet line and it is the same pitch class as the Bb which follows it, so disrupting the falling line. It should be a Cb – which is what is played on the recording of the work by the Netherlands Wind Ensemble, conductor James Wood (Amsterdam: Etcetera, 1992) [see my discussion above, p. 223, regarding Birtwistle's attitude to mistakes]

B A

CHAPTER 6

Lines and Circles: 'Punch and Judy', 'Secret Theatre'

'Punch and Judy': Morals

The aesthetic and technical challenges of modernism have been a strong stimulus to Birtwistle, whose endeavours to address the issues can perhaps be seen at their most uncompromisingly aggressive in his works of the 1960s. Beginning with Refrains and Choruses and culminating in Tragoedia, Punch and Judy and Verses for Ensembles, Birtwistle produced a series of works which explored different ways of pitting contrasting blocks of music against one another in a controlled dramatic context so as to create a coherent musico-dramatic statement out of widely divergent material. His dramatic model was the formal rituals of Greek tragedy which, through such artificial structures as refrain forms, symmetries and small- and large-scale repetitions in interlocking cycles, seemed ideally suited to Birtwistle's pithy, fragmentary musical material. Many different facets of the same problem were investigated: namely, how to give a logic and continuity to discontinuous musical phenomena. Nearly all his works of the 1960s examine the possibilities of exploiting the dramatic tension between juxtaposed blocks of violently contrasting music within a verse/refrain form. Refrains confer order (circle) whilst verses give continuity (line) and the two are held in some sort of balance by an imposed symmetrical scheme. Eventually, Birtwistle's dramatic urge was to achieve overt theatrical expression in the form of an opera.

Birtwistle and his librettist, Stephen Pruslin, were attracted to the Punch and Judy puppet show as the focus for an operatic collaboration not so much because of the subject matter it offered them but for the dramatic possibilities it presented. As Pruslin wrote, 'What we were not trying to do was to write a children's opera that would faithfully represent the traditional Punch and Judy puppet-play ... No, what we wanted was something quite different: a stylized and ritualistic drama for adults that used all the imagery, the trappings and paraphernalia of the original as a departure-point'. [1] A recent analysis of the popular tradition of performing the Punch and Judy show has highlighted the fact that oral performers were as much concerned with the actual structural features of the play as they were with its content: 'balance, chiasmus (that is, when the second half mirrors the first) framing and cumulation ... [enabled] the performer to give his work instantaneous organised cohesion'. [2] Repetition was the Punch and Judy man's principal structuring device, it seems, both in the short term through the use of question-and-answer formulae, punning games and traditional rhymes, as well as large-scale patterning of scenes, usually in groups of three. Yet within this framework, it was still possible to explore contrasts of character and action.

In the light of Birtwistle's preoccupation with cyclic structures, symmetry and violent contrasts in works up to Verses for Ensembles, it is perhaps not surprising that the ritual of the Punch and Judy puppet show should appeal. The libretto Pruslin gave him took the principal features of the traditional play and, by cross-fertilising them with other equally stylised and ritualistic forms (Greek tragedy, Baroque opera and the Passions of Bach), produced a sophisticated structure, a

number opera of more than a hundred separate sections, whose complexes of recurrent schemes, parallel narratives, symmetries and contrasts were perfectly tailored to suit Birtwistle's needs.

Fig. 6-1 is a schematic representation of the overall design of the main sections of the work. The cyclic nature of the text is readily apparent; yet this is underpinned by a linear thread. The Nightmare section acts as a central pivot point around which the whole opera is symmetrically organised: it is, to use Aristotle's terms, the moment both of peripetia and chiasmus. From this point on, the direction of the circular motion is reversed and the drama is propelled towards its conclusion.

Within and across these large-scale lines and circles smaller cycles and progressions operate, microcosms of the larger forms. One such cycle/sequence is given the title Moral and is associated with Punch's Quest for Pretty Polly. Punch's first two quests are unsuccessful and on each occasion his rejection is commented on by Choregos, in his role as Greek Chorus figure:

Weep, my Punch.
Weep out your unfathomable, inexpressible sorrow.
It is impossible, yet, restless, you try,
and torment yourself,
and are tearful.

Weep, poor, pathetic Punch.

Different levels of repetition, ranging from the consonant to whole words and line, articulate the (linear) narrative subject matter of the passage; the poetic devices Pruslin has used here to structure the text are representative of the sorts of methods employed throughout the libretto.

Overall Design

Fig. 6-1

Prologue

Melodrama I	Passion Chorale I	Quest for Pretty Polly I	Nightmare
Melodrama II	Passion Chorale II	Quest for Pretty Polly II	
Melodrama III		Quest for Pretty Polly III	
	Passion Chorale III		
Melodrama IV			

Punch Triumphans

Epilogue

Birtwistle's music for *Moral 1* reflects this and can also be examined in terms of lines and circles. The accompaniment in the pit orchestra is perhaps the most obvious manifestation of circle in this particular section and takes the form of a simple, self-repeating musical mechanism based on the number eleven (Ex. 6-1). This mechanism turns full circle every 11 crotchets and consists of a number of elements operating at different rates:

- 1) an *accelerando* group occurs on one of the tabors every 11 crotchets and articulates the start of each new cycle of the pattern;
- 2) the other tabor plays a sequence of 3 beats, each at a different dynamic level (*mf*, *f*, *mp*), at a distance of 11 triplet quavers from one another;
- 3) starting simultaneously with 1) and 2) is a Bb-D dyad played *mp* on the double bass, repeated once, *f*, 11 quaver beats later;
- 4) after 11 quaver beats the final element is introduced: a semitonal figure between trombone and trumpet which is palindromic in terms of durations and dynamics.

This pattern, once set in motion, continues to repeat itself, quite independently of anything else happening around it, and simply stops at the end of its seventh statement for no other reason than that the singer above it has finished, the stage lights are out and it has ceased to serve any useful function.

Such musical processes occur at various points throughout the opera, as indeed they do in many of Birtwistle's works of this period. Their regularity, their cyclic nature, their obsession with pulse have, paradoxically, the effect of bringing time to a standstill: once begun,

Ex. 6-1

Birtwistle, Punch and Judy, Moral I

Handwritten musical score for 'Punch and Judy, Moral I' by Birtwistle. The score is written on a grand staff with a bass clef on the left and a treble clef on the right. It features various musical notations including notes, rests, and dynamic markings. Above the staff, there are several horizontal double-headed arrows indicating time intervals, with labels '11f', '11f', and '11f' below them. The score is divided into sections by vertical lines. The first section is labeled 'cb.' and the second 'labors'. The third section is labeled 'accal.' and the fourth '3'. The score ends with a double bar line and a final '11f' interval.

they can continue ad infinitum. But what role do these mechanisms play in relation to the rest of the music around them? As already cited, Stephen Walsh has commented that such 'mechanical schemes do not have a great bearing on the essentials of Birtwistle's music (otherwise it would hardly impress us as an integrated body of work), but they do valuably generate "situations" within which the composer can work' [3] - in a similar way that, for instance, Birtwistle has used random numbers to generate pitches. As Hall has put it, 'a composer must find ways of allowing music to write itself' [4] so that decision-making is reserved for higher-level matters.

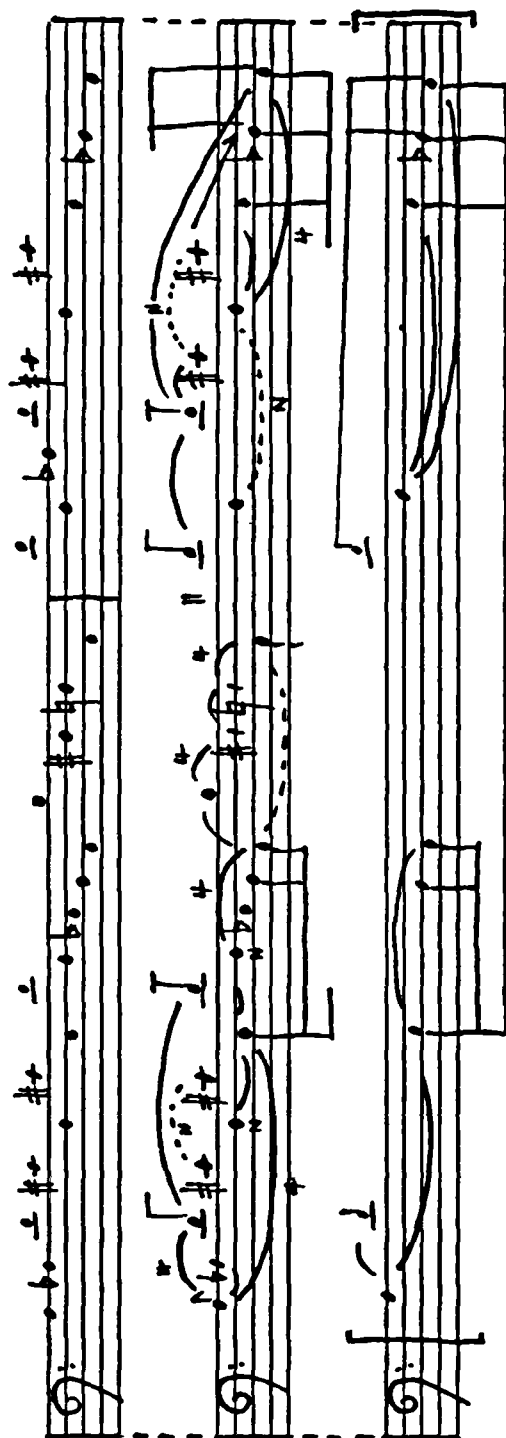
Choregos's vocal line, by contrast, is fundamentally linear in concept. Although the vocal line involves an element of recapitulation - determined by the return to the opening idea in the text - this does not contradict its essentially directed motion. Ex. 6-2 is an attempt to show the linear connections which operate in this vocal line. In no sense is such a voice-leading graph intended to imply that there are tonal forces at work here. Although there is but a single melodic strand, it appears to function as a sort of two-voice compound melody. Starting from the first pitch, A, we can see how the initial high and low goals of the composite line, D and E respectively, are symmetrically generated in fourths either side of it (Ex. 6-3a). Each of these new pitches has another pitch associated with it, a semitone away: the lower neighbour note of D and the upper neighbour of E. These pitches too are thus in a symmetrical relationship with the A (Ex. 6-3b). In fact the A itself is embellished by Ab (the significance of the semitone will be discussed below).

Rhythmically the vocal line of Moral I is quite free and, with the

Exs 6-2 & 6-3

Birtwistle, Punch and Judy, Moral I

Ex. 6-2



Ex. 6-3

exception of melismatic writing (for expressive purposes) on the word 'weep', the text is set syllabically. The rhythmic patterns are essentially determined by the speech rhythms of the text. Once arrived at, the E is rhythmically articulated as the main 'reciting' note of the vocal line and then proceeds to descend to the lowest pitch, C, the goal of both parts of Moral I.

The D on the other hand is made registrally quite separate from this linear motion in the lower voice and is left hanging in mid-air, to be picked up again after the interruption point when music and words are recapitulated. However, on the second occasion when the E reciting note descends to its final low C (now via Db rather than D), the upper voice D is prolonged by its incomplete lower neighbour Ce which is subsequently transferred down the octave and respelt as Db to lead to the low C goal with the lower voice. The D, it could be said, resolves on to the C. The tension in this atonal context which demands a resolution is thus not one of contrapuntal dissonance but of the counterpoint itself: one line proliferates into two and the music cannot come to rest until the two lines are once again reconciled.

Thus the ad hoc application of elements of voice-leading analytical techniques helps to isolate the way in which this vocal line achieves its linearity. Although, in theory, such principles should cease to have any pertinence outside the tonal repertory where the distinctions between consonance and dissonance no longer operate, nevertheless certain features with tonal resonances such as neighbour note prolongations and linear progressions can be seen to effect a degree of directedness, but in a different (atonal) context and for a different purpose. At the very least, such an examination does

highlight the polarity of vocal line and accompaniment: the directed motion of the former and the cyclic nature of the latter.

Of course, a case could be argued for the very reverse of the polarised picture I have just painted: the two musical strands are very much connected and inter-related. The dramatic framework within which both voice and instruments work determines, to a large extent, the sort of music Birtwistle is able to write here. The role of the accompaniment is connotative, one of establishing the mood or Affekt of the section: once the basic elements have been presented, there is no need for them to change until the dramatic situation changes, so they simply continue - quite mechanically, in this instance, as has been seen. The dramatic situation here is determined by the actual subject matter of the words being set, namely ideas associated with sorrow, torment, despondency and self-pity. The text, in an almost primitive way, dictates the musical subject matter: tempo (slow), dynamic level (generally soft), instrumentation (low-pitched instruments), and texture (sparse). The freely-flowing vocal plaint and the prominence given in both musical strands to the melodic semitone, an almost universal symbol of grief - as well as other examples of 'word-painting' - are further text-determined components which combine to create a coherent musico-dramatic expression.

Thus far I have adumbrated two apparently contradictory ways of seeing Moral I - one which presents a 'unified' view in terms of dramatic context and motivic cross-references, the other which emphasises the antithetical musical processes operating in the two principal strands of the music. In the short term, specific dramatic issues may seem to be of primary importance, but in relation to the rest

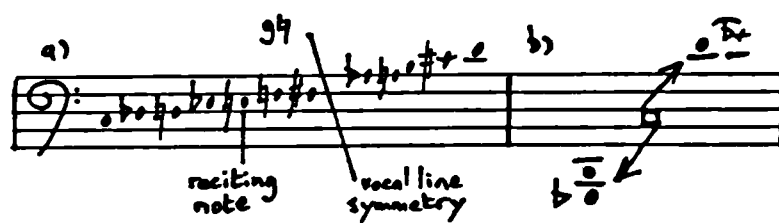
of the opera, or to other of Birtwistle's works, matters of musical process may be deemed to be of greater significance. However, the two views held here, rather than invalidating one another through their contradictions, can co-exist but are of greater or lesser consequence depending on the context in which the particular musical phenomenon is observed.

If these two analytical views were to be brought together, some sort of generalised statement might be made along the lines of: although vocal line and accompaniment proceed in two quite different ways, they can be seen to be related as they inhabit the same dramatic space. But does this mean that, in terms of actual pitches, there is no necessary connection between the two strands of music? In the light of the comment Birtwistle made in the 1960s that he could rewrite his music using different pitches without making any structural difference to it [5], what effect would it have if, for example, the vocal line were transposed down a tone? Its internal relationships would remain unchanged but its relationship with the accompaniment would be altered. However, Birtwistle did not write it down a tone: the relationship between the two strands does feel 'right'. This has something to do, I would suggest, with the way in which, in the abstract, the pitches used lie round centres of symmetry.

Ex. 6-4a shows the set of pitches used in the vocal line whose outer limits are placed around an absent centre of symmetry, G. However, when viewed along with the pitch content of the accompaniment, the low C in itself also becomes a centre of symmetry (Ex. 6-4b). The lowest double bass note, Bb, and the highest vocal note, D (also the highest instrumental note, embellished by its Eb neighbour), are

Ex. 6-4

Birtwistle, Punch and Judy, Moral I



symmetrically arranged around the C. Thus, one could argue, the entire musical space is organised around this one pitch, C, so reinforcing the earlier view of its hierarchically prominent position.

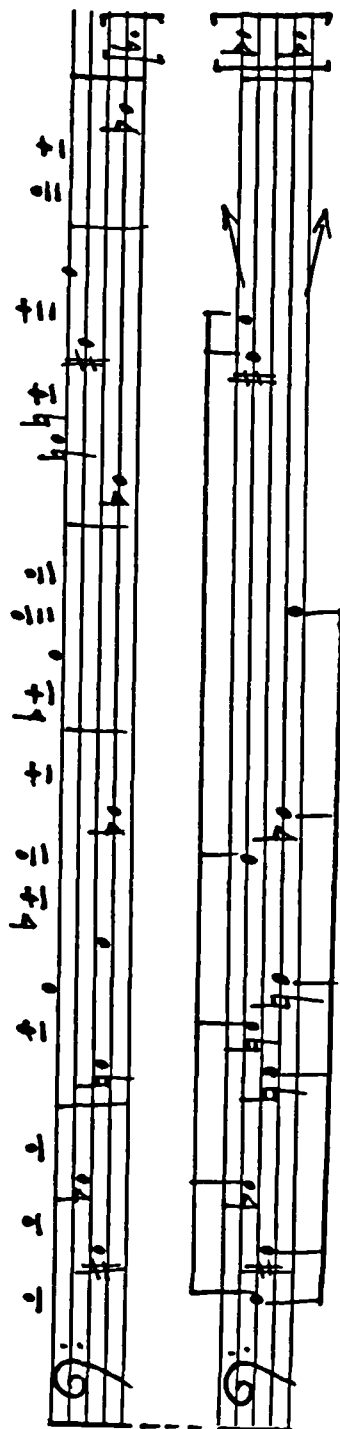
However, we might here also wish to reconsider the way in which the two strands of the vocal line function. Whereas earlier we viewed the upper voice D as resolving down on to the low C along with the lower voice (Ex. 6-2), now, heard in the context of the accompaniment, we might regard that upper D as being left hanging at the end, unresolved. Such an interpretation would be confirmed not only by the identity of this pitch in both voice and accompaniment (the highest significant note of both), but also by the symmetrical way in which this D is embellished by its semitone upper neighbour in the accompaniment and its semitone lower neighbour in the voice. Motion (voice-leading) and stasis (symmetry), line and circle, are held in a dynamic tension.

Moral II occurs in a similar position in Punch's second quest and not only is the text repeated exactly, but also it receives an identical setting in terms of the vocal line and pit orchestra accompaniment. Yet the repeat is not quite the same for a new strand has been introduced, played on the bassoon of the stage orchestra. The music and the drama have moved on so that by embellishing an otherwise exact repeat, Birtwistle manages simultaneously to express both the notions of circularity and linearity.

As with the separate elements of Moral I, the new strand is both independent of yet related to the music which surrounds it. Starting from the pitch D (which was of significance in Moral I), each new pitch class of this bassoon line is generated in a quite mechanical manner by

Ex. 6-5

Birtwistle, Punch and Judy, Moral II



moving in semitones symmetrically either side of this central pitch (Ex. 6-5. Cf. the 'wedge' in section IV of Refrains and Choruses, bs 89-122). Once 11 of the 12 pitch-classes have been exposed, instead of proceeding to the twelfth (which is the same in both directions from the D), the pattern stops and starts again, repeating its sequence of pitches exactly a further three times. However, this regular scheme is disguised by the manner in which the pitch-classes, once generated, are treated. The registral positioning of each pitch-class is determined in such a way as to create the widest possible interval between the pitches either side of it; also the repetition of pitch-classes already exposed takes place in an apparently arbitrary fashion. Rhythmically, too, the treatment of these pitches is both regular and irregular: each rhythmic 'block' is characterised by one particular durational value - all crotchets, all triplet quavers, and so on - but neither the number of pitches assigned to each durational value nor the order in which these blocks occurs seems to have any regularity about it. Although with every repetition of this sequence the pitches recur exactly, the rhythmic patterns do not. A similar situation can be seen in, for example, Carmen Arcadiae Mechanicae Perpetuum (discussed in Chapter 7) where the pitch mechanisms, according to the composer, remain constant but the registers and dynamics are freely composed.

The exception to this is an interpolated episode in which the pitch ordering is almost entirely different. Placed as it is, symmetrically between statements 1 & 2 and 3 & 4 of the main pattern, it acts as a central pivot point. Whilst the texture is the same - wide-leaping intervals, staccato, moving in rhythmic blocks - the introduction of the hitherto absent Ab sets this episode apart from the

cycles of pitches which surround it. Finally here, it is worth noting that the entire bassoon line is bounded by its initial pitch, D, and its final pitch, Bb, the symmetrical poles around the still present C goal of the vocal line.

Melodrama III is different from the first two. It breaks away from the regular cycles of events so far established and introduces new ideas as well as parodying already familiar material. Early on in the Melodrama, with a possible change in Punch's fortunes in the offing, Choregos sings a 'Morale', a clever inversion of the text of the Morals:

Leap, leap, my Punch.

Leap in uncompassed, impossible joy.

It is yet feasible, so, fearless, fly,

forget yourself,

and be free.

Leap, leap, proud, pellucid Punch.

The music reflects the inversion of this dramatic situation. There are now only two simple strands to the music, Choregos's vocal line and a line for solo horn, and the two are quite closely integrated. Both lines are loud, vigorous and wild and they share a similar rhythmic identity in the insistent use of Scotch-snap patterns. They appear to play a game of imitation: the horn answers the voice in its rests or sustained notes; repeated pitches in the voice are accompanied by sustained notes on the horn; and a return to the opening words prompts an identical procedure in the accompanying line. In terms of pitch organisation, however, the two lines proceed independently. Just as the text is a parody of its model, so the vocal line is a free variation of the corresponding line in Morals I and II. Ex. 6-6a shows the informal

Ex. 6-6

Birtwistle, Punch and Judy, Moral I/Morale

a)

Moral I

Morale

semitones about
big pivot

inv.

qths about
bb pivot

b)

The image contains two parts of handwritten musical notation. Part (a) consists of two staves, 'Moral I' and 'Morale', both in G-clef. 'Moral I' has a complex rhythmic pattern with many beamed notes and rests. 'Morale' has a similar pattern but with some notes circled and labeled 'inv.'. Annotations include 'sem. tones about big pivot' with an arrow pointing to a specific note in 'Moral I', and 'qths about bb pivot' with an arrow pointing to a specific note in 'Morale'. Part (b) shows a single staff with a rhythmic pattern, also in G-clef, with a key signature of one sharp (F#). The notation is dense and includes many beamed notes and rests.

way in which Birtwistle sets about rearranging, transposing, inverting and expanding intervallic patterns to create a new line from the old - different yet the same, another instance of viewing the same musical object from a new angle. The horn line (Ex. 6-6b) is brand new, although in its obsession with the semitone/minor 9th it could be seen to be generically related to the bassoon line of Moral II. The entire section is altogether much freer than the Morals which precede it.

The final occurrence of the Moral music is in Moral III near the end of the work during Punch's third Quest for Pretty Polly. The dramatic situation is slightly different here in that, when Choregos sings his lament, Punch has been neither rejected nor accepted by Pretty Polly. This is echoed in the music. The text, repeated exactly as in Morals I and II, receives an identical setting. However, the accompanying instrumental line is the horn passage from the Morale: the sequence of pitches is the same only now played softly, more slowly and with the snaps softened into triplet quaver-crotchet figures. The recall of the horn line in this context serves a dual dramatic function of looking back to the Morale and the more optimistic version of the text and thus anticipating what is to come, namely the winning of Polly and the jubilation of Punch Triumphans. The absence of any mechanical musical device underneath the vocal line also symbolises Punch having broken out of his earlier cycle of quest and rejection; once the circular motion has ceased, the centrifugal force impels the drama forward, linearly, to a new and different situation.

From an analytical standpoint, the coming together of these two strands of music has, retrospectively, an important bearing on the way

we understand the Moral music which has preceded it. Firstly, it substantiates the view of the essentially independent nature of each musical element. If different musics can be made to combine in many different ways, it must mean that any vertical correspondences are either totally unpredictable or else irrelevant. The fact that Choregos's line in Moral I recurs in Moral III with a completely new accompanying line must surely affect the way we view the nature of the relationship between vocal line and accompaniment in Moral I. Secondly, and conversely, the exact repetition of the horn line in Morale and Moral III actually serves to make clear the connection between the two versions of Choregos's line: to view two variants of an object in the same context makes the viewer more aware of their similarities.

It would be all too easy to adopt an approach to Punch and Judy which was content with merely describing the musical content of each individual unit and then giving the relationship of each with the rest of the score some semblance of logic by accounting for its place in the externally imposed formal scheme – an 'artificial' coherence. I have heard it said that, given the skilful construction of Pruslin's libretto, any fool could have written the music for Punch and Judy, the libretto does all the work for the composer. But surely, as we have seen, the opera amounts to more than 'sung play', to appropriate Kerman's term? [6] The structural features of text, drama and music are so closely integrated that it becomes almost impossible to separate them. The text and the drama operate in terms of polarities: the repetitive and the non-repetitive; the cyclical and the narrative; the symmetrical and the asymmetrical; the violent and the lyrical. The

music not only reflects these polarities externally by conforming to the text's formal dictates, it absorbs them into its inner substance, into the core of its structure, into the very way its pitches and rhythms are determined and interact with one another. It follows, then, that the analyst's approach to such music must inevitably be an empirical one, relying not on one theoretical view alone of how the music functions but taking a multiplicity of approaches as appropriate to the individual circumstances at any particular point in the work. By then relating these elements to the central 'polaristic' premise, it is possible to see that, even though one is not presented with a unified structure, the work can still be viewed as a coherent whole.

'Secret Theatre'

The following brief examination of aspects of Secret Theatre is intended to follow up the structural issues revealed by the discussion of passages from Punch and Judy, before returning to consider similar issues in Punch and Judy. Though written almost twenty years later than his first opera, and though in terms of surface features of the music Birtwistle's style has changed quite considerably, Secret Theatre still shares many of Punch and Judy's concerns. Most notably, the simultaneous yet balanced opposition of different kinds of music - an opposition between linear and circular musics - is central to the work, both in terms of its musical organisation and its theatrical realisation.

The theatrical dimension to Secret Theatre expresses the work's central polarity and immediately invites comparisons with similar concert works from the 1960s such as Tragoedia and Verses for Ensembles. The main body of the ensemble [7], the continuum, is seated in a semicircle in the centre of the platform while from time to time soloists move to stand at the back and to the left of the continuum to form, individually or together, a cantus. The cantus consists, virtually continuously, of flute/piccolo, oboe and clarinet and is joined on occasions by either trumpet and horn or by the two violins. This physical movement suggests the enactment of some kind of ritual and is supported by excerpts from the Robert Graves poem which prefaces the score and from which the title of the work is taken:

When from your sleepy mind the day's burden
Falls like a bushel sack on a barn floor,

Be prepared for music, for natural mirages
And for night's incomparable parade of colour ...
It is hours past midnight now; a flute signals
Far off; we mount the stage as though at random,
Boldly ring down the curtain, then dance out our love ... [8]

The theatre is a secret one because it is never made explicit. As an audience, we are witnesses to the movements of the players, the ways in which the members of the cantus are opposed to or absorbed into the continuum, but the motivation for this theatre remains undisclosed, mystical, magical almost. We are observers of a highly stylised ritual, but without the containing context of Greek tragedy or other formalised kinds of theatre, as in Tragoedia, Punch and Judy, Verses for Ensembles, etc. The rules which control this ritual stay hidden. As Andrew Clements has commented, ritual is never used by Birtwistle in an anecdotal sense, not least in Secret Theatre: 'there is no grafting of a dramatic skeleton to stiffen an inconsistent argument. Rather the ritual is implicit rather than explicit - it defines its own rules; it has become an indivisible part of the total conception of the work'. [9]

What, then, are these rules? As was noted in the earlier comparison of the work of Birtwistle and Klee, the composer has often talked about the form of his music more in topographical than in specifically musical terms. He has 'likened his attitude to form to that of a traveller in a big and unfamiliar city, who may move around according to a predetermined set of rules' [10]: In The Triumph of Time he spoke of a procession; In Endless Parade he described his encounter of a carnival winding its way through the narrow streets of Lucca. For Secret Theatre:

... I drew up a whole lot of precompositional ideas about how

things could progress, how they could get from point to point. I constructed a whole map, as it were. But then in the process of composition, in the journey, I went in other ways, so those original journeys are still there. [11]

The journey is continuous. Like the aptly named Endless Parade which followed it two years later, Secret Theatre is through-composed without the obvious block-like divisions or repetitions found in the works of the 1960s or even in Carmen Arcadiae Mechanicae Perpetuum. When musical objects do recur, such as the insistent D-F motif which opens and closes the work and which punctuates the music's progress, they are always placed in a new context, always seen from a new angle.

The opening of Secret Theatre illustrates clearly the musical as well as spatial distinction between cantus and continuum. In textural terms this is made apparent by the way in which the cantus plays a virtually unbroken line (an 'endless melody') until just before fig. 11 while the continuum is more sectional and stratified. Indeed, this distinction holds true for the rest of the work too. Clements [12] has observed that, in this opposition, Secret Theatre manages to synthesise the concerns of two earlier works written for the London Sinfonietta: the cantus appears as an extended elaboration of the melody lines in Silbury Air while the block-like mechanisms of the continuum originate in the sectional structure of Carmen Arcadiae Mechanicae Perpetuum. And, once again, we see a Klee-like or Stravinskyian polarity set up between something seemingly natural/organic/unpredictable and something manufactured/mechanical/predictable. -

The continuum defines its rules in terms of repetition. The first block (from the beginning as far as fig. 1) is made up of a number of

elements: a) the repeating D-F motif in upper strings; b) a 'cello line which rotates the pitches of a pair of chromatic trichords C-C#-D, G-G#-A; c) a similar line in double bass which rotates the pitches D#-E-F-F#-G-B. All three elements start with three exact repetitions and then begin to behave slightly less predictably - though still involving a high degree of repetition - in terms of the rhythms of a) and the patterning of pitches in b) and c). However, all are held together by the regular semiquaver pulsation, where an event occurs on every semiquaver beat, and by the overall cyclical pattern of note values:



It is thus a very regular mechanism but with a degree of flexibility built into it. [13] It is circular in that it can continue for as long or as short a time as necessary. It is suspended once after seven turns of the note value cycle, and is broken off completely after a further four (fig. 1).

The next mechanism occurs between figs. 1 & 2. It is rhythmically more straightforward, consisting of a Scotch snap gesture made up of a 'root' interval in trombone and double bass followed by a piano and vibraphone chord. There are always two such gestures per bar although, because the metre is constantly changing, the durations between attacks are not even. The bass is usually doubled by the trombone at the interval of about a fourth or fifth - such approximation is typical of Birtwistle: a single line is enriched by another and a general pattern is maintained but never exactly, leaving 'rough edges'. The chords, in a similar way, are consistent but not predictably so: they employ the entire chromatic and each voice moves within a narrow range (seen most clearly in the vibraphone dyads extracted from the piano chords) yet no chord is the same. This mechanism, too, could continue to operate

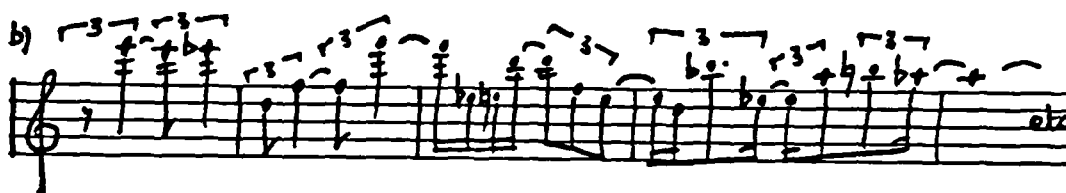
according to its self-defined rules for as long as necessary. In both these sections of the continuum the limits of the musical mechanism are circumscribed but it is not closed and the music is free to move freely within those limits, almost at whim. The frequent use above of qualifications ('usually', 'approximately', 'never exactly') leads us to two conclusions: first, that the application of rigorous, pitch-oriented analytical techniques (such as pc set analysis) is inevitably doomed to failure because the music is never that systematic (that is not what it is 'about') - at best, it can confirm (systematically) the lack of system; and second, that individual pitches are not locally, in themselves, particularly important: the composer's and our attention is directed to matters of higher level structural significance such as the essential oppositions or proportional relations - or, indeed, larger-scale pitch continuities made by, say, the pitches D and F.

Longer-term connections - or interlocks - across the sections of the continuum, of the kind discussed at length in Carmen Arcadiae Mechanicae Perpetuum, are also to be found. The third section, beginning at fig. 2, continues the ideas established in the first section but also contains a version of the scotch snap figure from the second section. Cello and double bass work the same pitch collections as before within the same semiquaver pulse but now the interjections of the three triplet semiquaver group are more erratic. The D-F dyads in upper strings proliferate into two dyads, D-Fe and F-E, which alternate. Already, given musical objects are being viewed from new perspectives.

The beginning of section three coincides with the entry of the second cantus voice, the oboe, which joins (in unison) the flute that has been playing virtually from the start. The cantus melody rides

Ex. 6-7

Birtwistle, Secret Theatre, cantus, flute



Ex. 6-8

Birtwistle, Secret Theatre, cantus, oboe



almost regardless over the top of the continuum. It pauses when the continuum is interrupted but otherwise the cantus would seem to have little to do with the continuum in the early stages of the work. The pitch-class content of the flute melody from the beginning to fig. 2 is straightforward: it consists of two superimposed chromatic tetrachords (Ex. 6-7a) but whose realisation is elaborated in the music by octave displacements (Ex. 6-7b). These pcs are freely rotated, with only occasional repetition at the octave (interestingly, only of pcs D and F, the insistent pitches of the continuum). The directedness of the line, to the extent that it can be discerned, results from its very continuity in opposition to the fragmentary utterances in the continuum and from its generally decreasing note values rather than from any quasi voice-leading patterns. The entry of the oboe heralds an outward expansion of the pitch-class material so far employed: each chromatic tetrachord now gains another semitone (Ex. 6-8) suggesting a gradual linear progression quite unlike the stratification and interlock in the continuum. There is a change in rhythms at fig. 3, coinciding with another change in the continuum and, with the entry of the clarinet five bars later, the final two pitches of the chromatic (C-F#) are quickly introduced. The harmonic field then begins to narrow down again, the first move being initiated by the momentary joining of the cantus by a member of the continuum (vibraphone, fig. 4, b. 5).

Elsewhere in Secret Theatre the melody becomes apparently more complex: as many as five instruments can articulate the line simultaneously. It is doubled, usually in unison, sometimes in octaves; it is enriched in parallel motion by doubling at a consistent interval so that there is no single locus for the melody but a summation of all

Ex. 6-9

Birtwistle, Secret Theatre

a)

71

fl ob cl vn1 vn2

mp sempre

b)

59

60

fl ob cl vn1 vn2

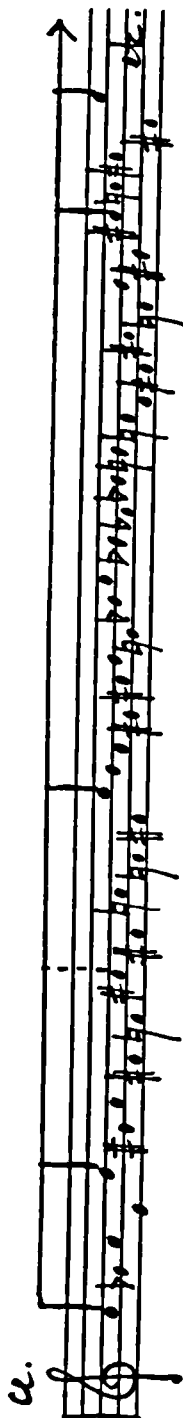
pppp

the lines (see Ex. 6-9a, p. 112 in score, for such an instance; this a prime example of Klee-like 'two dimensional planes which are brought into being by the simultaneous movement of lines' [14]); and it proliferates into two or more composite lines which taken together form a single melodic strand (Ex. 6-9b, fig. 59 in score). Its linearity is never compromised. A striking example of this can be found at figs. 38-41. The continuum is here at its most mechanistic and most clearly circular with the upper strings repeating a G₆-D dyad while other voices regularly rotate 3-note cells. The three strands of the cantus, on the other hand, demonstrate a strong directed motion: the pitch collection of each strand is limited, but their peak notes show a general tendency to rise (the lowest strand, the clarinet, is given in Ex. 6-10). In this case, the opposition between line and circle is extreme but it is balanced or contained by its positioning within the overall proportions of the work, within the ritual scheme.

What I hope these rather lengthy descriptions reveal is that, though both cantus and continuum are regularly changing and, indeed, though there is a certain similarity between their rotations of pc material, the process of change in each is distinctly and crucially different. The cantus is a linear entity, an 'endless melody' whose focus slowly and gradually shifts as the piece progresses; the continuum is much more stratified and is essentially circular, proceeding by interruption, fragmentation and larger-scale interlock. The ritual of the piece, its secret theatre, is to do, it would seem, with the way in which cantus and continuum interact. There are passages of clear opposition, as at the start or at fig. 38, and there are other important moments of coming together, such as at fig. 66; it is the movement from

Ex. 6-10

Birtwistle, Secret Theatre, cantus, clarinet



one state to the other and back again that controls and contains the fundamental oppositions.

'Punch and Judy': Passion Aria II

Precedents for the kind of writing observed in Secret Theatre can be found as far back as Punch and Judy. Take, for instance, one of the most beautifully lyrical numbers of the entire opera, Judy's Aria (Passion Aria II), which occurs in Melodrama III (V.S. pp. 119-22). The specific model invoked here, by which both music and drama are contained, is the formal device of the da capo aria which is preceded, as in Baroque opera seria, by a recitative. Interestingly this is the only da capo form to appear in the entire opera, despite (as noted earlier) the Baroque-like 'affective' preoccupations of the majority of the work's numbers. The surface gestures are familiar ones. The vocal line of the Recitative declaims the text syllabically and is relatively fast, loud and quirky involving wide melodic leaps; its accompaniment begins with a tremolando sustained 'cello note (a gesture perhaps more familiar from nineteenth-century accompanied recitative) and the ends of vocal phrases are punctuated by a little repeating musical object in low wind instruments. The A section of the Aria consists of a soft, slow, sustained and melismatic vocal melody with oboe d'amore obbligato and an appropriate harp and alto flute accompaniment in the pit orchestra. The B section provides the customary foil to this by being less still and focussed, so enabling the repeat of the A material to appear all the more tranquil. Both the musical mood and the scoring take their cue

from the text: 'Be silent, strings of my heart'.

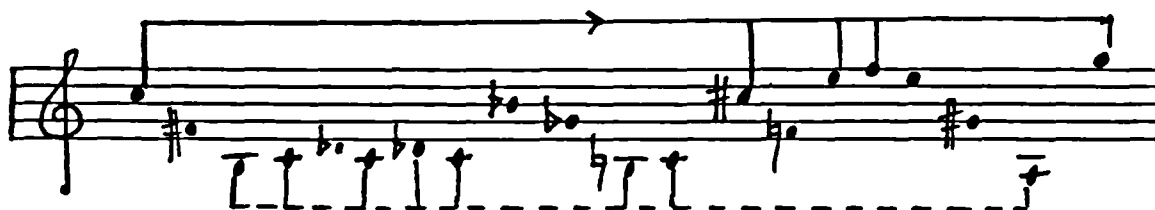
The line in the A section of the Aria, Judy's melody, is not as obviously 'directed' as Choregos's melody in the Morals but is nevertheless forward moving – in this sense, it is more like the melody of Secret Theatre. This movement is brought about principally by its rising profile: the melody is led to rest on the final high G but this is achieved gesturally and through the tendency for large leaps to get progressively larger rather than by any kind of conventional voice-leading. As always with Birtwistle, even in a melody line, registers are kept distinct (Ex. 6-11).

A closer examination of this line reveals an unexpected symmetrical model, a symmetry which is only clearly disclosed by the final three pitches (Ex. 6-12). This symmetry is not always exact (as we have seen, this is not problematic for Birtwistle) but given the propensity for symmetrical organisation elsewhere in the work and the general air of control about this section, it is not, I would argue, without significance. However, it is interesting that in this case a melody with a degree of forward momentum is contained by a static (bilateral) symmetrical scheme.

However, this symmetry is confused in the context of the rest of the music. Most interesting in relation to the cantus of Secret Theatre is the way in which Judy's line is supported by the obbligato which parallels it consistently at the distance of 1c 5; more specifically, it is always either a perfect fourth below or a perfect fifth above the voice. But this simple organum is clouded by the way in which the obbligato is freely decorated so that it does not shadow the voice exactly, generating a line which is simultaneously dependent on and

Ex. 6-11

Birtwistle, Punch and Judy, Passion Aria II



Ex. 6-12

Birtwistle, Punch and Judy, Passion Aria II



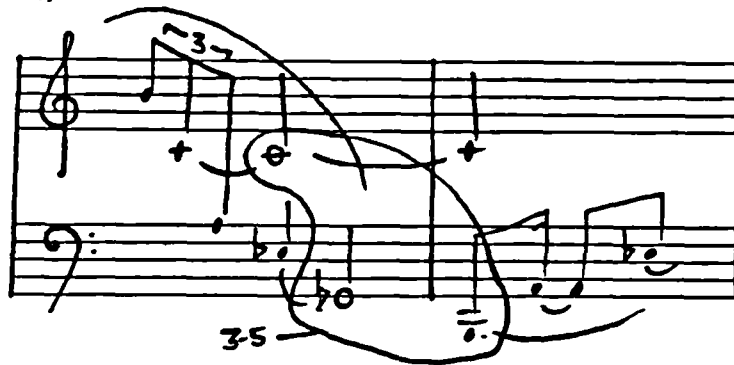
Independent of its double. In terms of its contour, the obligato tends to mirror (i.e. invert) the vocal line so as to provide interesting counterpoint yet maintain forward momentum. It almost behaves as if it were a trope of a cantus firmus – certainly, allusion seems to be made here to a pre-Renaissance successive method of composition. Or, as Klee would have it, the main line is accompanied by a form which reflects its essential motion, which is given meaning or motivation by it, and yet which remains relatively independent. [15]

The accompaniment is different. It consists of two phrases of eight and six crotchet beats respectively, repeated exactly, with a 'codetta' phrase of six beats tagged on to the end. The pair of phrases repeat only once because the melody they support has already exhausted itself by the end of the repetition and thus cues the closing codetta. This repeating structure suggests a circular mode of operation in opposition to the linearity of the melody though, like the melody, each phrase of the accompaniment has a simple contour – the first rising then falling in almost symmetrical, equal halves, the second rising, only being balanced by the final descending codetta phrase of equal duration. Apart from general mood and contour, the only specific connection between line and circle here appears to be a motivic one. The opening vocal phrase outlines C-F#-B, a form of set 3-5 (a 'favourite' collection, as was seen in Refrains and Choruses), and the same collection forms the link between the two phrases of the accompaniment (Ex. 6-13a) as well as featuring prominently in different overlapping forms in the second phrase (Ex. 6-13b). It is present also in the codetta phrase and is a part of the final sustained harmony (Ex. 6-13c). However, of equal significance are the many other horizontal figures

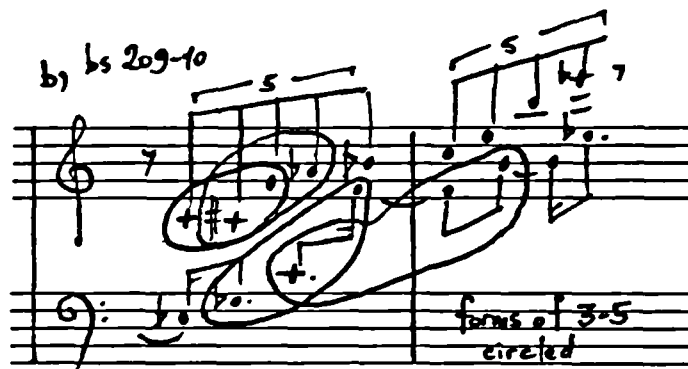
Ex. 6-13

Birtwistle, Punch and Judy, Passion Aria II

a) bs 208-9



b) bs 209-10



c) bs 217-18



which resemble the opening vocal phrase but do not form set 3-5: gesture is always more important to Birtwistle than rigorous motivic manipulation. There are many gestures which outline a seventh or a ninth and contain one or more of the constituent intervals of set 3-5: for instance, the upper voice E-B-Eb at the end of the second phrase (see Ex. 6-13b) or the final descending vocal phrase (2nd time), G-C#-F. There is thus an informal kind of harmonic consistency alongside the gestural and affective parallels which relate line and circle here but do not undermine their opposition.

All these features appear more exaggerated in the B section. The vocal line, though more erratic, still seems to suggest a forward motion and is again doubled/mirrored at lc 5 by the obbligato, which continues to decorate itself as before. Both of these lines show a high frequency of occurrences of set 3-5 (Ex. 6-14). The melisma on the word 'bridge' (b. 226) is of particular interest: not only is it a kind of résumé of the essential gestures of the Aria, but it also makes a musical and dramatic connection (a bridge, perhaps?) with Judy's earlier lyrical number, her Lullaby from *Melodrama I* (V.S. pp. 10-13), where set 3-5 is horizontally prominent and the 'bridge' figure occurs almost exactly to the word 'lalow' in bs 166-7.

Symmetry is now evident in the accompaniment (see Ex. 6-15a). It has an overall arch shape (summarised in Ex. 6-15b) which is informally symmetrical but which, because of the prominence again of set 3-5, might be understood as an augmentation of the 'bridge' figure. The organisation of its rhythmic values, however, is precisely palindromic even though the durations, echoing the arch shape of the pitches, are not exactly so (Ex. 6-15c).

Ex. 6-14

Birtwistle, Punch and Judy, Passion Aria II

FORMS OF SET 3-5

The musical score is written on two systems of staves. The first system consists of two staves: the top staff is labeled 'Judy' and the bottom staff is labeled 'Oboe d'amore'. The second system also consists of two staves: the top staff is labeled '1+3+3' and the bottom staff is labeled '1+3+6'. The notation includes various musical symbols such as notes, rests, and accidentals. Handwritten annotations include circled groups of notes, arrows indicating connections between notes, and some numbers like '3' and '4'. The score is written in a sketchy, handwritten style.

Ex. 6-15a: Birtwistle, Punch and Judy, Passion Aria II, bs 219-35

219

Musical score for measures 219-224. The score is written for three parts: JUDY, STAGE, and PIT. The lyrics for JUDY are: "The rain-bow, The rain-bow (uu)". The STAGE part has a melodic line with lyrics "The rain-bow (uu)". The PIT part has a complex accompaniment with various dynamics including *pp*, *p*, *mf*, and *f*. The music features a mix of eighth and sixteenth notes, with some measures containing triplets.

225

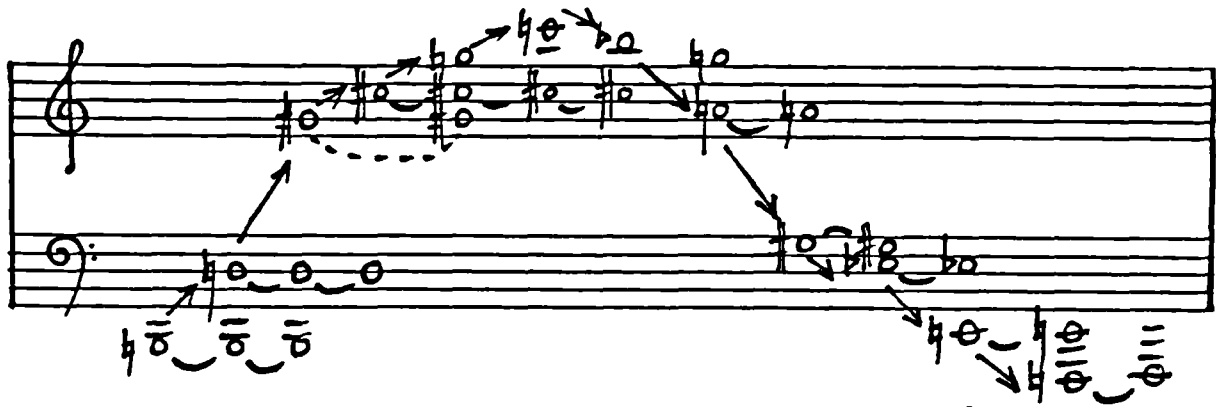
Musical score for measures 225-229. The score is written for three parts: JUDY, STAGE, and PIT. The lyrics for JUDY are: "on this bridge re-veals re-(a)-veals and pen-". The STAGE part has a melodic line with lyrics "on this bridge re-veals re-(a)-veals and pen-". The PIT part has a complex accompaniment with various dynamics including *pp*, *mp*, *f*, and *mf*. The music features a mix of eighth and sixteenth notes, with some measures containing triplets.

230

Musical score for measures 230-234. The score is written for three parts: JUDY, STAGE, and PIT. The lyrics for JUDY are: "-sions of e ter-nal e ter-nal har-mo-ni-ty". The STAGE part has a melodic line with lyrics "-sions of e ter-nal e ter-nal har-mo-ni-ty". The PIT part has a complex accompaniment with various dynamics including *pp*, *f*, and *mf*. The music features a mix of eighth and sixteenth notes, with some measures containing triplets. A box labeled "235" is present in the upper right corner of this section.

Ex. 6-15b

Birtwistle, Punch and Judy, Passion Aria II, bs 219-35



Ex. 6-15c

	'the rainbow on this bridge...						... reveals suspensions of eternal harmony'					
rhythmic value:	♩.	♩	♩ ^{r5}	♩ ^{r3}	♩ ^{r3}	♩ ^{r3}	♩ ^{r3}	♩ ^{r3}	♩ ^{r5}	♩	♩	♩.
duration (♩ beats):	13	9	6	6	4	2	2	4	6	8	10	[1] 25

The B section exemplifies once again a relatively simple structure dependent on the opposition between line and circle. The symmetrical organisation of the accompaniment (the 'continuum'), in the way in which it turns back on itself, implies something circular and predictable; the melodic voices (the 'cantus'), though not inextricably linked, are nonetheless in a fixed intervallic relationship and together seem to express something linear and more unpredictable. This opposition is contained by gestural and motivic cross references: the two principal strata are held in a balanced tension.

A comparison of Secret Theatre and Punch and Judy thus reveals common structural concerns and methods of working. Not only does a notion of opposition inform both works, but more specifically the balancing of linear and circular musics lies at both their centres. The means by which line and circle are defined and elaborated are strikingly similar; it is only the ways in which their opposition is balanced, contained and interpreted that differ, even though in both cases this takes place in a 'theatrical' context. In certain respects, Secret Theatre is the more complex work because it has neither the overt dramatic framework of Punch and Judy to give meaning to the oppositions, nor does it have the opera's clearly defined block structure and patterns of repetition. Its through-composed nature and the lack of any exact larger-scale repetitions makes its form much harder to discern and consequently the relationship between cantus and continuum is not so immediately articulated. Its moment by moment progress is clear; the map of the entire journey, to use Birtwistle's phrase, is more complicated. Indeed, the use of the word journey is misleading because it implies a

definite path from one point to another whereas the work actually meanders, more like a river or Klee's 'line on a walk'. To understand the form one must examine very closely the constantly changing relationship (in terms of closeness or distance) between cantus and continuum: it is this dynamic notion of form, akin to Varèse's idea of form as process, which gives meaning to the oppositions and which allows for the work's ritual dimension. Because our understanding of the form, as we listen, has constantly to be reassessed (the music is not, as it were, being poured into some ready-made formal mould), the motivation for the ritual, the theatre, remains only half-revealed: a secret theatre.

NOTES

- 1 Sleeve note accompanying the recording of the work (London: Decca, 1980), HEAD 24/25
- 2 Robert Leach, The Punch and Judy Show. History, Tradition and Meaning (London: Batsford, 1985), p. 153
- 3 Stephen Walsh, review of Hall, Harrison Birtwistle, in Soundings, No. 12, 1985, pp. 75-8
- 4 Michael Hall, Harrison Birtwistle, p. 10
- 5 See Michael Nyman, 'Two New Works by Birtwistle', Tempo, No. 88, 1969, pp. 47-50
- 6 See 'Opera as Sung Play' (Chapter 7) in Joseph Kerman, Opera as Drama (London: Faber & Faber, rev. 1989), pp. 140-57
- 7 The scoring is the same as for Carmen Arcadiae Mechanicae Perpetuum but with a larger percussion requirement. It was similarly written for the London Sinfonietta and was first performed by them on 18 October 1984.
- 8 Preface to the score. Text extracted from Secret Theatre by Robert Graves contained within his Collected Poems (1975).
- 9 Andrew Clements, programme note on Secret Theatre in BBC Birtwistle Festival Programme (London: BBC Concerts Publications, 1988), p. 41
- 10 Clements, programme note on Earth Dances, *ibid.*, p. 53
- 11 Birtwistle in interview in Paul Griffiths, New Sounds, New Personalities (London: Faber & Faber, 1985), p. 188
- 12 Programme note on Secret Theatre, *op. cit.*, p. 42
- 13 The similarity of this music to that of mechanism E in Carmen Arcadiae Mechanicae Perpetuum (see discussion in Chapter 7 below) is striking.
- 14 Klee, The Pedagogical Sketchbook, pp. 18-19 - see discussion in Chapter 4, note 27
- 15 See Chapter 4

A

CHAPTER 7

'Carmen Arcadiae Mechanicae Perpetuum'

Of all Birtwistle's works, Carmen Arcadiae Mechanicae Perpetuum is, on the composer's own admission, the one that invites the most direct comparison with the ideas of Paul Klee. It is a homage to Klee and the title of the work, Birtwistle states, 'is a title he [Klee] could have invented'. [1] The oxymoron that finds itself expressed in the notion of a mechanical pastoral is one that, as we have seen, finds its origins in the Pedagogical Sketchbook where Klee discusses the operation of both the regular/geometric and the irregular/natural. The machine and naturally occurring phenomena co-exist in Klee's drawings and paintings; regular and mechanical processes exist alongside apparently free and intuitive techniques in Birtwistle's music. Such an opposition lies at the centre of Carmen Arcadiae Mechanicae Perpetuum and is outlined by Birtwistle in his customary brief comments on the piece:

It consists of six mechanisms which are juxtaposed many times without any form of transition. The dynamics of the piece have a time-scale independent of that of the mechanisms, creating an independent dynamic life of their own. This process is also applied to the registers of the piece. [2]

In other words, he seems to be suggesting that once the pitch (or, indeed, pitch-class) and rhythmic material has been set in motion, it composes itself out while, on to this process, the dynamics and registers of that material are 'hand crafted' in an intuitive and intentionally oppositional way.

There is an obvious model in Klee for Birtwistle: the painting,

The Twittering Machine (1922), which represents four mechanical birds in a strangely coloured landscape. [3] It is a picture that is at once enigmatic (there seems no obvious connection between the birds, the arrows and exclamation mark which pierce them, and their context) and humorous (how will the birds behave when the handle is turned?). The machine is a quirky fusion of the mechanical and the natural.

Birtwistle admits to six rather than four 'creatures' in his twittering machine and I do not think it is too fanciful to suggest that the sounds with which the ensemble begins represent the chirrupings of a rather peculiar mechanical menagerie. Birtwistle's Carmen, with its constant stopping and starting, its unexpected juxtapositions and repetitions, and its extremes of scoring and dynamics, is not without humour either.

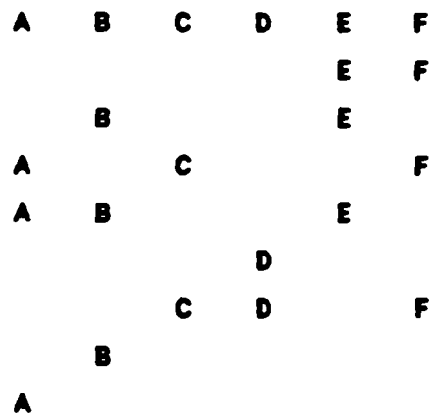
The influence of Stravinsky is also apparent. Indeed, Stravinsky's concern for both the natural and the mechanical, as explored at length by Daniel Albright, aligns his work in a fascinating way with both that of Klee and Birtwistle: 'the deep equivalence of the natural and the artificial ... In the dance artifice and nature are most intimate, as if each were the culmination of the other'. [4]

Stravinsky's opera, The Nightingale, is the most obvious link between Carmen and The Twittering Machine, in its treatment of the story of how the Emperor of China confuses the song of a mechanical nightingale with that of the real thing - though there is no evidence to suggest that Klee was familiar with Stravinsky's musical fairy tale, nor that it was a specific model for Birtwistle. Nevertheless, the music for the mechanical bird, along with the structural influence of works such as the Symphonies of Wind Instruments and Agon, clearly lie behind Carmen Arcadiae Mechanicae Perpetuum. Parallels might also be drawn with the

music of Messiaen, in a work such as Chronochromie, where the natural phenomenon of the birdsong is placed, as with Carmen, in the context of highly repetitive and block-like musical structures.

All the commentators to date who have chosen to write about Carmen Arcadiae Mechanicae Perpetuum - and none has written more than a few sentences - have been happy to reproduce Birtwistle's statement about the work's structure in terms of the juxtaposition of six kinds of musical mechanism. None has attempted to identify these six mechanisms, nor has any demonstrated their large-scale organisation or how they interact with the independent dynamic and registral schemes. [5] Even a casual glance at the score reveals that the situation is nowhere near as straightforward as the composer might wish to suggest. Though the music is composed in discrete blocks separated, usually, by refrain-like sustained notes or chords, some of the mechanisms are altered quite radically during the course of the piece, so much so that it is often difficult to discern the connection between later musical blocks and their originals. Even in the earlier stages of the work, it is perfectly feasible to be able to isolate seven groups in terms of pitch/rhythmic material and the ways in which that material is processed. Nevertheless, assuming that the composer was correct in his assertion about the work's structure (though there is no necessary reason to suppose that he did get it right!), it is certainly possible to discuss it in terms of the near-even distribution of six musical ideas across the work, as summarised in Fig. 7-1.

Fig. 7-1:



The confusion over whether there are six or seven separate mechanisms is located principally in the music which starts and ends the work (compare from b. 2 to fig. 1 with fig. 19 to the end). These musics are quite different. The first music divides the ensemble into four separate strands – woodwind, brass, string quartet and marimbaphone & double bass – distinguished by their rhythmic groupings. The motion of the whole is governed by a constant triplet semiquaver pulse at crotchet = 120. This metronome mark occurs only twice in the piece, the other occasion being an obvious reworking of the opening material (at fig. 9). The last music organises the entire ensemble homorhythmically with a highly distinctive pattern of a pair of triplet quavers followed by three quavers at the slower rate of quaver = 184. This is the only occasion that this specific metronome mark is used but it is, of course, the equivalent of the frequently occurring crotchet = 92. The only evident progenitor for this final material is a passage which occurs between figs. 11 & 12 which has more widely divergent pitch material but a similar rhythmic organisation, dividing the 5/8 bar into three triplet quavers and three quavers. The metronome mark here is the only other one to occur in the work, namely quaver = 168. There is no significant

relation between these tempi, which can be expressed in whole numbers in the following way:

$$\begin{array}{ccccc} \text{quaver} = 168 & : & \text{quaver} = 184 & : & \text{crotchet} = 120 \text{ [quaver} = 240\text{]} \\ 21 & : & 23 & : & 30 \end{array}$$




Thus, I would argue, the initial intention is that these musics should sound very different; certainly, any connection between the 6 bars at fig. 9 and the 11 bars at fig. 11 is difficult to discern immediately.

However, there is perhaps a greater similarity between these sections than there is between other clearly defined sections of the work and, it could be argued, a link is forged between first and last statements which act as a gestural frame. Despite the surface rhythmic disparities, these sections would appear to be linked by the mechanism that operates on their pitch materials. Each individual voice concerns itself with the rotation of a set of three or four pitches contained, usually, within the interval of no more than a fourth. This high level of repetition of pitch material, combined with the relative regularity of the rhythmic organisation, makes for a highly distinctive yet 'static' music. It is static in the sense that it is completely undirected and the music simply breaks off, the rotations stop, when each section as a whole has filled its allotted durational span. Thus, though the space occupied by each of these musics is quite different (the opening music is built of a 6-bar block which repeats immediately only once; the closing music, once it 'settles down' is built of 1-bar blocks and repeats immediately many times), the pitch and rhythmic mechanisms are decidedly similar and so, for the purposes of the overall

structure, can be seen to be variants of the same idea.

If this is so, it might then be possible to demonstrate connections between the opening A material and other sections of the music. For instance, there might be links with the way in which pitch material is processed in what I have labelled block E. There are in the sense that a number of the strands here (see, for example, fig. 4) display a similar kind of pitch rotation and repetition to that found in block A. However, the material here is more diverse – for instance, the line in the piano L.H. which rapidly exposes all 12 notes of the chromatic, and the change of rotational patterns for the 2-bar 4/8 section – and rhythmically it is not at all clearly characterised, despite the constant semiquaver pulse. Voices do not move homorhythmically although, inevitably, there is a certain degree of vertical coordination. This diversity is more apparent on subsequent appearances of the material and, perhaps most significantly, we find that at fig. 9 mechanisms E and A are juxtaposed, something that would be unlikely to happen if they were the 'same thing' as it would serve to minimise the principle of opposition ('non-transition') which lies at the heart of the piece. Thus, as was the case with block A above, for the purposes of the overall structure, E should be understood as a distinct musical mechanism.

The defining characteristics of each of the six mechanisms, then, are given below. The principal identifier of each block on recurrence (certainly as far as the listener is concerned) would appear to be rhythmic because it is its rhythmic identity which remains more-or-less constant across the various transformations of the material.

- A: Regular pulsation involving triplet quavers. Rotation of 3 or 4 pitches in each voice contained, usually, within a fourth's range and together forming a chromatic aggregate.
- B: Strands made up of long-short rhythmic cells - in the first instance, just three types: a)  b)  c) 
The principal strand is usually shared between a pair of voices and is contained within the range of a fourth. High degree of cellular repetition. Quaver = 168.
- C: 3-note clusters in the piano, usually occurring in pairs, contained within a small interval. Sometimes accompanied by a regularly pulsed vertical sonority and always by an irregular horizontal idea. The block is never repeated exactly. Crotchet = 92.
- D: Homorhythmic motion employing a variety of rhythmic patterns (with durational values from sextuplet semiquavers to triplet crotchets) and each strand often covering a wide intervallic range. On 2 out of its 3 appearances it is accompanied by a descending idea in longer note values. As with block C, this block is never repeated exactly. Quaver = 168 [except at fig. 3 where crotchet = 168, the only time this mark occurs. Possibly a mistake]. *
- E: Pitch rotation and repetition as in A. However, material more diverse and contains non-rotational chromatic elements. Voices are not generally vertically coordinated and although there is constant semiquaver movement there is no regular rhythmic patterning. Quaver = 168.
- F: Distinctive homorhythmic patterns made up of straight and triplet quavers and semiquavers. Each individual strand fills out chromatically the interval of, usually, a perfect/augmented fourth but without any regular rotation of pitches. The resulting parallel movement of voices (often within a consistent containing outer interval) gives the impression of a kind of chromatic organum. Crotchet = 92.

* NB Elgar Howarth and the London Sinfonietta in the recording of the work (Amsterdam: Etcetera, 1987) read this as quaver = 168.

One interesting feature to emerge from the above descriptions is the role played by tempo (metronome mark) in defining the mechanisms. With the exception of block A, whose role in any case would seem to be rather different from that of the other mechanisms (see below), material returns on each occasion at its initial tempo, i.e the music articulates a clear distinction between crotchet = 92 and quaver = 168. However, there is no relation of significance between these tempi: as seen above, they are in the ratio 23:21. In keeping with Birtwistle's desire for there to be no form of transition in the work, he seems to be maximising the opposition between them. This is in contrast to Carmen's most obvious antecedent, the Symphonies of Wind Instruments, where the blocks of very different material are related by three tempi in the ratio 2:3:4 (Tempo II is half as fast again as Tempo I and Tempo III is half as fast again as Tempo II). Silbury Air, written earlier in the same year as Carmen Arcadiae Mechanicae Perpetuum, displays similar concerns. In many ways, Silbury Air is close to Carmen in its preoccupation with pulse, in its structure formed from musical blocks, and in its Klee-like origins:

I have often alluded to my music of landscape presenting musical ideas through the juxtaposition and repetition of 'static blocks' or, preferable in my terminology, objects; these objects themselves being subjected to a rigorous invented logic via modes of juxtaposition, modes of repetition, modes of change; the sum total of these processes being a compound artificial landscape or 'imaginary landscape', to use Paul Klee's title. [6]

The score is prefaced with what Birtwistle describes as a 'pulse labyrinth', a series of stepped charts which show the relationships between metres and metronome marks, a background means of regulating the

'metrical modulations' in the work.

No such metrical modulations are possible in Carmen. However, there does appear to be a kind of logic governing the relative proportions of sections. Fig. 7-2 shows the sequential distribution of mechanisms A to F along with their metronome marks and durations expressed in quaver beats. What is apparent at the beginning of the work is what might be termed 'proportional modulation'. Each section of the first four sections, despite their distinct differences in tempi (and, if the crotchet = 168 at fig. 3 is to be believed, there are four separate tempi for as many mechanisms), is of the same relative length, i.e. 36 quaver beats long, whatever the actual duration of the quaver unit. The number 36 also governs the length of many of the other sections in the initial part of the work and, indeed, multiples of 36 provide for the structure of the entire first part of the work up to the entry of A material in the form in which it is eventually to conclude the piece (i.e. at fig. 11, with its distinctive new rhythmic patterning, at just over the half way point). This indicates the importance of proportion as a structural device. It is not the constituent mechanisms in themselves (because they will continue ad infinitum, like the eponymous perpetual motion device, until stopped by some external force), nor even their juxtaposition, which is of significance, but the relative durations of sections and the ordering of those juxtapositions.

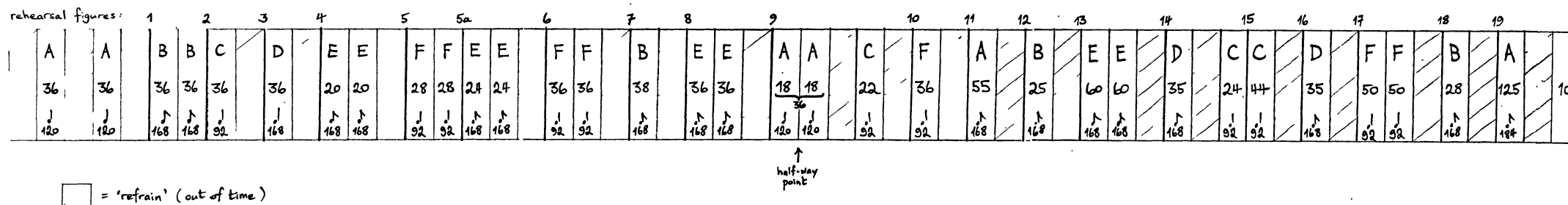
After the entry of the A mechanism at fig. 11, the proportions of sections in the rest of the work seem to take on a different, less regular, less predictable character. The durations of sections also become more variable and, generally, longer. The final A block is by

far the longest section in the work. This suggests an assessment of the A material in terms of a Stravinsky-like 'signalling' role. Its appearance at the beginning and end of the work, albeit in quite different forms (and perhaps reflecting their differing functions), of course gives it privileged status; but its appearance at fig. 11 would also seem to signal a structural change, i.e. the break up of the relatively regular proportional patterning so far evident, and thus divides the whole into two more-or-less balanced halves. This sense of a change, or at least of starting again and reviewing ideas already presented, is enhanced by the return of the sustained pitch F_4 in the trumpet at b. 8 of fig. 11 and continued into the pause refrain bar, a single pitch whose only other prominent appearance is at the beginning of the work at the same pitch level. The function of the compressed statement of A material at fig. 9 is less clear although it may be of significance that the exact halfway point, in terms of quaver beats, of the metrical material occurs almost precisely at the dividing point of the two 18-beat portions of this section (beat 615 of 1227).

It is obvious from the foregoing discussion that distinct blocks of musical material are juxtaposed in such a way as to maximise their opposition. This would suggest an almost 'static' structure where there is no sense of development or direction. Certainly, as the composer suggests, there is no transition from one block to the next; continuity is, of necessity, locally disrupted. However, there are evidently larger-scale connections across appearances of the same mechanism and although 'development' would be an inappropriate term for the way in which the material is handled, its reworking is in keeping with Birtwistle's avowed propensity to view the same musical object from a

Fig. 7-2

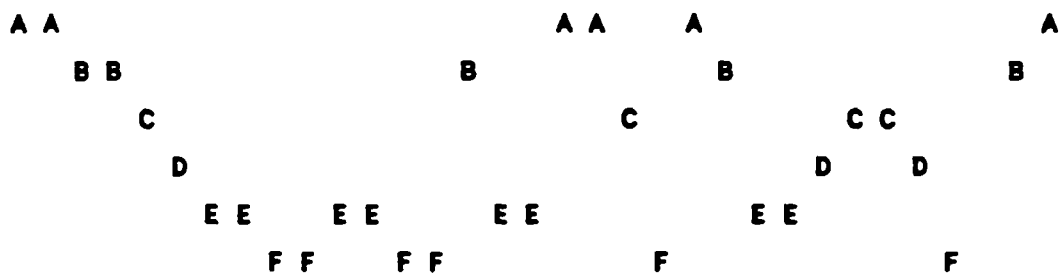
Birtwistle, Carmen Arcadiae Mechanicae Perpetuum, Overall Structure



number of different angles. Such an approach allows for controlled change without necessarily implying the linear continuity of development. Perhaps then an appropriate way to approach this analytically would be to assess the work's structure in relation to Cone's categories of stratification, interlock and synthesis.

The stratification in the work is clear and is set out in Fig. 7-3. The organisation of a work into musical strata, as we have seen, is an on-going concern of Birtwistle's - at it most elaborate in Earth Dances - and it again brings to our attention the fascinating parallels between structural aspects of the music of Stravinsky and Messiaen and the painting of Klee (see Chapter 4, note 36).

Fig. 7-3



The stratification of musical layers is, of course, made apparent by the distinct separation of material and the interruption of one mechanism by another. On the surface, the separation of musical areas appears even more complete than in the Symphonies of Wind Instruments; there is not in any obvious sense, as Cone discovered in the Symphonies, '[i]n almost every case ... at least one element of connection between successive levels'. [7] However, the difficulties evinced above in identifying the particular stratum to which certain ideas in Carmen belong attests to

the fact that even in this work connections do exist across boundaries. The similarities between A and E have already been noted, and there are many other examples: for instance, the use of 'irregular' (i.e. non-rotational) three-note piano clusters in A at fig. 9 might suggest links with C; D at fig. 14 has the typical rhythms of its mechanism but 2-voice writing in trumpet and horn more characteristic of B; and it is quite obviously E at fig. 8 but nevertheless it includes the pulsed vertical chords more readily associated with C. There seems to be a general tendency for individual identities to become merged as the piece progresses. Moreover, lc 5 (usually in the form of a perfect fourth) appears to have a role to play that cuts across the divisions of sections: it is a dominant feature of most mechanisms, whether it be as a melodic interval, a range within which a line moves chromatically or an agent of 'harmonisation' (quasi-organum). This is to suggest neither a transition between areas, nor any kind of motivic background uniting the foreground diversity, but simply a common element which is worked in diverse ways (another instance of viewing the same object from different angles).

'When the action in one area is suspended, the listener looks forward to its eventual resumption and completion ... The delayed satisfaction of these expectations occasions the second phase of the technique: the interlock'. [8] The kind of 'supra-sectional' continuity Cone identifies in the Symphonies is also apparent in Carmen but in a different way. The interlock between successive statements of A, for instance, has already been alluded to. A-2 (fig. 9) is a compressed version of A-1 (it is half the original duration) where the processing mechanism and pulsation is the same but the material on which it

operates is altered slightly and its vertical co-ordination is not so clear, as well as incorporating (as noted above) piano trichords derived from C. A-3 (fig. 11) continues this diversification by disrupting the even triplet pulsation to produce a new but equally distinctive rhythmic grouping whose definition grows as the section proceeds. The process is, however, interrupted and does not find its fulfilment until A-4 (fig. 19) which quickly settles into the routine of bar-length repetitions to which all the A sections seem to have been aspiring. This is the most stable and most predictable music of the entire work which might account for its duration being the longest of the work.

The interlock of some sections is obvious. F retains a strong identity on each of its appearances: it proceeds by an accumulative process and gets progressively longer. The transformations of D, on the other hand, are much more profound where one instance of the mechanism offers only a very partial glimpse of the whole object (which is never fully revealed). Thus, the processes of interlock vary greatly from one musical mechanism to the next. There is not the large-scale linear continuity across the interruptions as Cone found in the Symphonies but instead a variety of different connections, some of which do suggest a kind of linearity, others of which are more circular.

Synthesis is the least apparent feature of the processes in Carmen Arcadiae Mechanicae Perpetuum. For Cone, 'some sort of unification is the necessary goal towards which the entire composition points, for without it there is no cogency in the association of the component areas'. [9] In the case of the Symphonies of Wind Instruments, this 'synthesis' (in the sense of balancing - see the discussion in Chapter 3) is brought about by the long, final chorale. Despite a number of

factors which might suggest a process of 'synthesis' towards the end of Carmen (e.g. the apparent linearity of mechanisms such as A and F, the progressive lengthening of sections in preparation for the final section, the gradual incursion of layers of material from one mechanism into another stratum), there is no obvious convergence of ideas and the mechanisms remain 'in play' to the double bar (indeed, beyond it as the final cadence only calls an artificial halt to proceedings).

Gesturally, the long final statement of A behaves like some kind of concluding section (in keeping with its signalling role discussed above), and the extended refrain passage which precedes it has the sustained qualities one might associate with a chorale, but otherwise there is no resolution or coming together at this point.

Although the composition has pointed to some sort of temporary goal, this does not mean that the unification which Cone so desires is not present, and that the work thus lacks cogency. 'Some sort of unification' is achieved by keeping all the constituent components in meaningful opposition by means of the kind of proportional schemes examined earlier - its rules of containment. The overall form is given in Fig. 7-3 by the patterning of the juxtapositions of sections: a wave shape is revealed which involves a typical Birtwistle reversal towards the end. There is no synthesis in a tonal sense but then neither is there in Stravinsky. Rather, we are left with a formal situation strikingly similar to that of the non-symmetrical balance discussed by Klee in the Pedagogical Sketchbook where an equilibrium of unequal elements is established, 'the balancing and proportioning power of eye and brain that regulates this expansion of the object toward equilibrium and harmony'. [10]

A further feature Cone identifies in the Symphonies of Wind Instruments is a passage he describes as a bridge and which is a device for 'mitigating the starkness of the opposition between strata'. It does not serve the function of a transition between sections but instead is 'an area with a life of its own ... Although acting as a bridge in the immediate context, it reaches forward to its next appearance in the interlocking pattern'. [11] The refrain-like sections of Carmen would seem to behave in a similar way. In no sense do they act as transitions between one mechanism and the next but they do 'mitigate the starkness of the opposition' between them, signalling the end of one and the beginning of the next. Although, like many of Birtwistle's refrains (see, for instance, the discussion of Four Songs of Autumn in Chapter 8 below), they stand temporally and gesturally outside the main sequence of oppositions, they do nevertheless belong: indeed, they set up another parallel stratum in the work. The refrains belong in the sense that they too show a certain predilection for Ic 5 - most apparent from the start until fig. 8 and particularly in the slow motion in fifths before fig. 6 (although note how perfect fourths or fifths sometimes become augmented fourths or diminished fifths, providing rough edges to an otherwise predictable pattern). But successive statements of the refrain interlock across the work to form a stratum which is seemingly far more continuous than any other. Each refrain is made up of a sustained note or chord and, sometimes, an acciaccatura figuration. A summary of the stratum of sustained notes and chords is given in Ex. 7-1.

The refrains, then, engender a sense of continuity. This is brought about partly by the way in which their sustained pitches overlap

Ex. 7-1

Birtwistle, Carmen Archadiae Mechanicae Perpetuum, 'Refrains'

(Rehearsal figs.)

1 2 3 4 5 6 7 8

9 (9a) 10 11 12 13 14 15 16

17 18 19

a - principal refrain pitches

b - other sustained pitches

with the main sections of the work and make connections despite the oppositions between the mechanisms. A clear example is to be found at the beginning of the work. A sustained perfect fourth, C \sharp -F \sharp , in trumpet and horn forms a bridge not only between the two exactly repeated statements of A but also between A and B with which it overlaps, forming a second distinct stratum for 6 of the 12 bars of B. The interval then proliferates into a sustained wind hexachord at the start of C (there is no pause-bar refrain separating B and C); the F \sharp is picked up again at the end of the section to form a bridge between C and D. The earlier C \sharp -F \sharp dyad in trumpet and horn returns to form part of the acciaccatura figures which punctuate the refrain that links D and E. A similar connecting role is played by low sustained pitches (usually C and B \flat) in contrabassoon, trombone and doublebass towards the end of the piece (from about fig. 14) which eventually opens out into the prolonged, climactic refrain section before fig. 18 – a sequence of twelve sustained chords with acciaccaturas. By this stage it seems almost as if the refrains have become another mechanism in their own right. Indeed, at times the refrain stratum is a dominant element even in the main body of the work – see, for example, the sustained chord in strings and wind in F at fig. 10.

The continuity provided by the refrains, however, is an artificial one. There is no apparent logic to the large-scale connections made and though they give a sense of linearity as shown above, this is highly contextual/referential and certainly could never be demonstrated by any kind of voice-leading technique, however adapted or compromised. Nonetheless, their essentially still, non-rhythmic yet connected character forms another fascinating opposition with the highly rhythmic

juxtapositions of the other strata.

A brief word about the dynamics and registers of the piece. Both cover an extreme range from *pppp* to *ffff* and from the lowest register of the contrabassoon to the highest register of piccolo and violin. Crescendos and diminuendos are rare – in fact, there are only two obvious examples: in the sustained, trilled (refrain) chord at fig. 10 simultaneously with F material in piano and marimbaphone; and in the final extended refrain passage. For the most part, as with the pitch/rhythm strata, dynamics are juxtaposed without any form of transition. Sometimes this happens in blocks, as at the very beginning where the initial *ff* 6-bar statement of A is repeated *pp*, and sometimes very rapidly, such as at the return of A material at fig. 9 where almost every triplet quaver beat has a different dynamic level selected from *ppp*, *p* and *mf* with regular *ff* piano chords on every third beat. There is no consistent deployment of dynamics across interlocks, confirming Birtwistle's claim that they operate independently of the mechanisms themselves. Indeed, the changing dynamics help to place the repeating mechanisms in new contexts, yet a further example of the means by which objects are reviewed from constantly changing perspectives. [12] Note how, for example, the dynamics (along with the register and scoring) bring a new perspective to block F at fig. 17 by picking out triplet quaver pairs which then seem to take on a life of their own. However, dynamics are used to differentiate between a mechanism and the refrain when they sound as simultaneous strata – see, for instance, figs. 2 and 10. Though commentators have reiterated Birtwistle's assertion that a separate dynamic scheme is in operation without giving details, it is not, it seems to me, a highly ordered scheme – at least, I cannot

discover the key, if there is one, to its logical organisation; rather, its function is to impose a different order of continuity on to the juxtapositions and repetitions.

The same is true of the registral scheme. As with the dynamics, Birtwistle has had a free hand in deciding on changes in register for subsequent appearances of the same material thus giving repetitions a distinctive character. A comparison of any successive statements of interlocking material will reveal this. However, as suggested earlier, register would appear to play a more significant and consistent role in the appearances of refrain material. The important referential *F#* always occurs at the same registral level; continuity across the refrain statements towards the end of the work is achieved because reference is made to the same specific pitches and scorings. This supports further the refrain's bridging role.

Carmen Arcadiae Mechanicae Perpetuum thus provides us with a relatively concise illustration of Birtwistle's musical and structural preoccupations. Furthermore, the parallels it evinces between the theoretical ideas and paintings of Paul Klee and the music of Igor Stravinsky suggest useful contexts within which the work can be discussed. Its principles of opposition are clear but it quickly becomes apparent that these oppositions are more than the simple juxtaposition of musical mechanisms as implied by the composer's own note on the work. Carmen Arcadiae Mechanicae Perpetuum is not merely a sophisticated kind of clock which, once wound, will continue to behave perfectly predictably until its energy is exhausted. The mechanical dimensions of the music are given a new perspective by its non-

mechanical aspects, its intuitive or unpredictable features, and are contained by carefully worked out proportional schemes. Just as with Klee and Stravinsky, Birtwistle's Carmen is striving for balance where its many contradictory elements are held together in a meaningful but non-synthesising context. It defines its own rules simply and clearly. Thus the music is made coherent without necessarily unifying all aspects of its structure. The function of analysis, even the essentially poietic kind of analysis demonstrated above, is to attempt to elucidate those rules – not just to show 'how the work was composed' (which, if sketches were available or the composer were more forthcoming, might quickly be revealed), but to place it in a broader interpretative context. For music such as this, where no one analytical technique in itself can be consistently or meaningfully applied, the perspective offered by modernist models from music and the visual arts is of great value in providing a flexible framework for discussion.

NOTES

- 1 Programme note quoted in Michael Hall, Harrison Birtwistle, p. 177
- 2 Ibid.
- 3 Oil drawing (traced) and water-colour on paper in the Museum of Modern Art, New York
- 4 Daniel Albright, Stravinsky: The Music Box and the Nightingale, pp. 4 & 8
- 5 See Andrew Clements, 'Harrison Birtwistle. A Progress Report at 50', Musical Times, Vol. 125, March 1984, pp. 136-9; Clements, liner note to the CD recording of Carmen Arcadiae Mechanicae Perpetuum (Amsterdam: Etcetera, 1987), KTC 1052; Hall, op. cit., p. 96
- 6 Preface to the score
- 7 Edward T. Cone, 'Stravinsky: The Progress of a Method', p. 19
- 8 Ibid.
- 9 Ibid., pp. 19-20
- 10 Sibyl Moholy-Nagel in the Introduction to Paul Klee, Pedagogical Sketchbook, p. 10 - see Chapter 4, note 48
- 11 Cone, op. cit., p. 20
- 12 Though there are many such instances in Birtwistle of the constant being placed in a changing context (the fixed, repeating melodies in The Triumph of Time, the trumpet material in Endless Parade, and so on), the most interesting comparison in this case is with the brass ritornellos in Verses for Ensembles. The music remains fixed on the printed page but, in performance, it is always changing because the players make choices regarding routes through the music, mode of attack, use of mutes and dynamics independently of the way the rest of the music is progressing. In the case of Carmen, the composer has made the decisions about dynamics a priori but quite independently of other aspects of the structure.

NK G

'Four Songs of Autumn'

In November 1987 I set out to write a piece for the Sinfonietta's birthday. It was to have been an arrangement of my piece for clarinet and voice, Deowa. After three weeks' work I realised that I would not be within light years of being able to complete it and the project had to be abandoned. So in a fit of melancholy I wrote these four songs for soprano and string quartet. [1]

Though brief, the Four Songs of Autumn display many of the characteristics that have become consistent features of Birtwistle's music since his earliest published works. In their contemplative, melancholic mood, they may appear, on the surface, to be very different from the 'dramatic' works of the 1960s (Tragoedia, Verses for Ensembles, Down by the Greenwood Side, etc.), yet there are ideas here in common with the softer moments of Punch and Judy (the Morals, Judy's Aria - see Chapter 6) and the musical mechanisms of, say, the Chorale from a Toy Shop. The relationship of these songs with Birtwistle's music of the 1970s is more readily apparent, the idea of the processional again being to the fore, and works of the 1980s such as ...agm..., On the Sheer Threshold of the Night and Earth Dances have each left their mark. Most obviously the centring of the music around the note E unites these songs with a stream of pieces from The Fields of Sorrow to The Mask of Orpheus and (along with the notes D and F) Secret Theatre.

The pitch-class E is a constant presence in the songs with the exception of the two notes at the beginning and the three notes at the

end which frame the work. It is introduced in the cello and, in the course of the songs, gradually works its way up through the instruments of the quartet, an octave at a time. (The solo soprano remains outside this process). Indeed, each song is characterised by a unique E pitch level, individually coloured. This musical layering is not only confined to that voice carrying the E. At the end of each song, just as the E moves 'up a voice', so does everything else (see Ex. 8-1): the instrument carrying the E hands it on to the voice above it, above which sound the pitches D and F, above which again sounds a further reinforcing D. At the end of the next song, these ideas are simply rotated; similarly, at the end of the third. The exchange of instrumental roles thus has an important cadential ('refrain') function. In the abstract, the D and F can be regarded as embellishing upper and lower neighbour notes to the E; the actual situation is more complex than this because the pitch levels, and hence the relationships between pitches, change on each occasion. However, for the moment, let us say that, by its very insistence, the E acts as some kind of centre to the music, a focus or axis. To be able to look at the same musical 'object' from a number of different viewpoints has been an ongoing concern in Birtwistle's music and the way the cadential idea is composed out here is a further example of this.

It is not just the pitch level of the E that changes in each song: its articulation also becomes more involved as the piece progresses. It appears first as a long, sustained pedal note in the 'cello - an unchanging object in terms of pitch, dynamic level (pp) and absence of rhythmic articulation.

On its hand-over to the viola (b. 13), it begins in a similar way

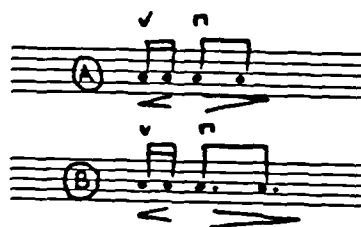
Ex. 8-1

Birtwistle, Four Songs of Autumn, 'Refrain'



Ex. 8-2

Birtwistle, Four Songs of Autumn



but then immediately adopts a rhythmic character even though, as before, the dynamic level remains a constant *planissimo*. Its rhythms consist of a combination of dotted semiquaver notes and demi-semiquaver rests, either alternating or in pairs, within the 3/8 time-signature. This inevitably involves a high degree of repetition, certain patterns and whole bars occurring a number of times – though never exactly the same since Birtwistle takes care to vary the bowing on each repetition.

The third song has the E in violin 2 (b. 29) and it takes on seemingly more complicated rhythms built from combinations of semiquavers, quavers and dotted quavers in units of either 6 or 8 semiquavers' duration. In actual fact, the rhythmic structure here is highly repetitious and consists of just two patterns where the second is a varied form of the first (Ex. 8-2). Again, identical repetition is offset by varying the time-signature so that no pattern is notated the same way on any two occasions. The crescendo and diminuendo markings (still within an overall *planissimo*) serve to delineate each durational unit; furthermore, the bow markings are always the same and correspond to the dynamics i.e. two 'upbeat', up bow semiquavers, crescendo, followed by the 'downbeat', down bow portion of each unit (either 2 quavers or 2 dotted quavers), diminuendo.

In the final song, the E passes to violin 1 (b. 49). It is played this time on an open string and is articulated in quintuplet semiquavers. However, a second double-stopped voice is added to embellish this E with semitone neighbour note motion symmetrically either side of it. It is a highly regular pattern. The rhythm is never varied; the accent always falls at the beginning of each group of semiquavers. Not only is the pitch symmetry exact, but so is the manner

in which it is exposed i.e. a 6 quaver glissando descent to D₄ and return to E (pp - mp - pp) mirrored by a 6 quaver ascent to F and return. As on every other occasion, the E stratum is made to be independent of the music surrounding it; what is interesting here is that this line now separates itself temporally from the other players and the soprano - its new quaver = c. 100 marking continues irrespective of the quaver = c. 54 which has so far controlled the whole piece. This 'mechanism' begins to wind down only when the main body of the music has slowed; it stops simply because the rest of the music has done so.

Thus a progression can be discerned with regard to the course of the E through the four songs. The higher this pitch moves through the instruments of the quartet, the greater the degree of regularity there is to its rhythmic organisation i.e. a progression from no rhythm at all (song 1) to a highly regular rhythmic structure (song 4).

The progress of the pitch E through the quartet is, in some senses, what the songs are 'about'. As has already been suggested, the small musical events which stand either side of this form a frame for the work, a kind of prelude and postlude. But do they function as such? For obvious reasons they remain outside the main argument: the soprano is silent; their tempo marking is different; only one voice is moving; their dynamic levels are softer than what they precede or follow. Indeed, the composer's instruction that the players should 'freeze playing positions for first entry' supports a reading of the cello opening as prefatory; similarly, the silent players are instructed to hold their bows still, in mid-air, at the end. In terms of theatrical gesture, prelude and postlude are thus related to the cadential idea where the silent players also suspend physical movement and which,

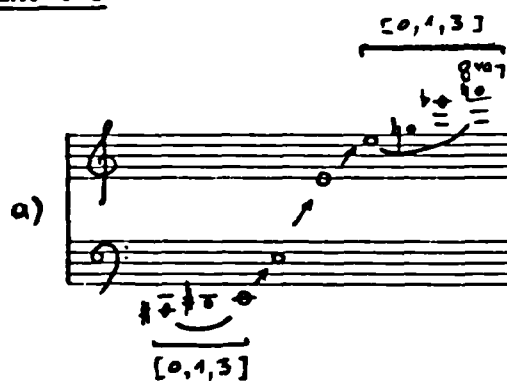
formally, stands outside the main course of the work, i.e. the songs themselves.

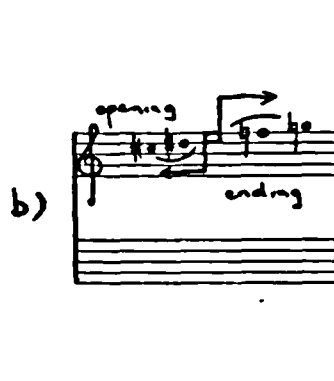
What, then, connects prelude and postlude with the music they surround? As has already been observed, these are the only occasions in the songs when the pitch E is not heard to sound. However, in abstract terms, the pitches of prelude and postlude begin or continue the process of centring about E. The cello pedal E of the first song is approached from below by C \sharp and D \sharp , an obvious connecting motion (see Ex. 8-3a). Furthermore, the [0,1,3] motif it exposes appears to have a degree of motivic significance in the rest of the piece (as perhaps one would expect of material presented in a prelude). Certainly the pitch classes of the cadential idea, to which, as we have seen, it is formally related, also form an [0,1,3] cell.

The high E of violin 1, which dominates the final song, is quitted in like fashion: as the upward progress of the E in the work was anticipated by the rising motion to the initial cello E, so the upward motion is continued through G and E \flat to F. The new pitch-classes here (F and G) also form an [0,1,3] cell with the E (assuming, for the moment, that the opening D \sharp and closing E \flat are enharmonically equivalent). Taken together, the prelude and postlude are arranged symmetrically around the pitch-class E that dominates the body of the work, thus further supporting their framing role (Ex. 8-3b).

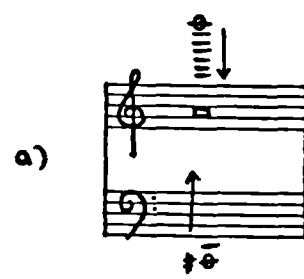
Of course, the actual registral positioning of the pitches disguises these symmetries: the prelude and postlude have to be seen to be working outside the main argument of the piece, acting as some kind of formal markers. Certainly the final violin statement puts an end to the rotation of the cadential idea found, up to this point, at the


Ex. 3-3

a) 

b) 

Ex. 3-4

a) 

b) 

Ex. 8-5



Ex. 8-6



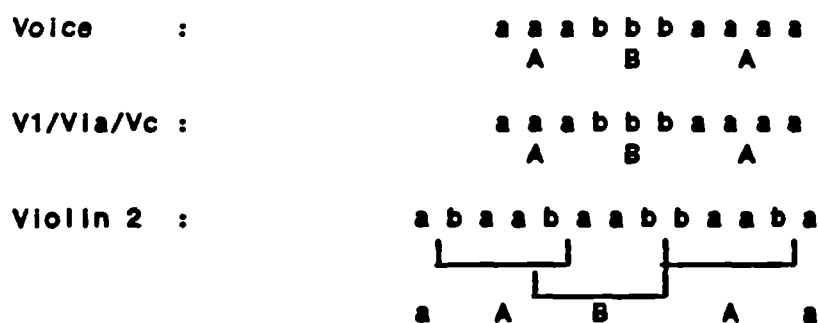
conclusion of each song. Furthermore, the notes given to cello (prelude) and violin 1 (postlude) serve the function of opening up the musical space, defining the music's operational framework, i.e. the piece begins with its lowest note and ends with its highest. This generates a situation where the actual centre of symmetry is not now an E but an A (see Ex. 8-4a). This would appear to have little bearing on the way in which the music has unfolded, although it might be noted, in passing, that the final vocal phrase is centred around this very A (see Ex. 8-4b).

Apart from the fact that E is at the centre of the music due to its constant reiteration, what evidence is there to support a reading of E as a constant literal centre of symmetry? The clearest example of this kind of organisation is to be found in the vocal line of the third verse. For the first time, a pitch in the vocal line has been doubled at the octave within a song - here the octave Bbs. The reason for this is that the line is arranged around the (absent) centre of symmetry, E, with the Bbs representing the tritonal polar extremes (see Ex. 8-5). However, this E is an octave higher than the insistent E in violin 2. Furthermore, the actual centre of symmetry of this song as defined by the instrumental registral limits is the Fe a tone above the violin 2 E, not the E itself. [2] A closer examination of the organisation of this third song will help to decide if these symmetries have any bearing on its structure.

The rhythmic regularity of the violin 2 line has already been discussed. This regularity is also apparent in the other three instrumental lines which, as in song 2, play in rhythmic unison. Indeed, just as in violin 2, only two patterns are in evidence here, one

a variant of the other (see Ex. 8-6). The two schemes, i.e. in violin 2 and in the rest of the quartet, appear to proceed independently. The vocal line, for the first time, demonstrates a clear temporal relationship with the instrumental writing: it too has a regular rhythmic pattern of a demi-semiquaver upbeat followed by one or two notes of either 9 or 11 demi-semiquavers' total duration. Furthermore, the commencement of each rhythmic cell always coincides with the three note pattern in violin 1, viola and cello, the vocal demi-semiquaver acting as some kind of anacrusis. In all three of the constituent elements of this song a similar overall shape can be seen: the two patterns in violin 1, viola and cello are grouped in an overall ABA scheme; the two vocal patterns are also grouped according to an ABA scheme; and the rhythmic patterns in violin 2, though not quite so obviously organised, can also be seen to operate within a larger ABA scheme (Fig. 8-1a).

Fig. 8-1a: Rhythmic Patterning in Song 3



The ABA shapes of the voice and the trio clearly coincide; the patterning of the violin 2 E is only approximately coordinated with

this. However, by organising each layer in a similar rhythmic way, i.e. with the shorter form of each durational pair constituting each 'B' section, an element of formal coherence is achieved in that the song undergoes a degree of compression towards and expansion away from its centre of bilateral (durational) symmetry. The durations of the rests between each rhythmic unit in voice and trio parts reflect this compression and expansion (Fig. 8-1b):

Fig. 8-1b: a [7] a [7] a [9] b [5] b [5] b [9] a [7] a [9] a [11] a
 └───A───┘ └───B───┘ └───A───┘

[Integers in square brackets represent rests in units of demi-semiquavers. The voice has one less unit of rest in each instance]

Of course, to talk of a 'centre of bilateral symmetry' is misleading because the symmetries are not exact in this case. However, as in much of Birtwistle's music, there is a central turning point, a moment in a piece when the ideas turn back on themselves and the formal processes are reversed. Even in a section of a work as seemingly simple as this such processes can be discerned: exact, total symmetry does sometimes occur in Birtwistle's work, but arch shapes and quasi-symmetrical patternings such as these (Klee's 'non-symmetrical balance') are much more common.

In this song, the way the vocal line is structured appears to take its cue from the text. In common with many of the texts Birtwistle chooses to set, it is the sound of the words as much as their meaning that is important to him. The English translation of this Japanese poem is characterised by much assonance and alliteration. Birtwistle segments the text in accordance with these sound patterns to produce groups of three words (with the exception of the last):

- | | |
|-----|--|
| i | When <u>the</u> moon <u>light</u> |
| ii | <u>starts</u> to <u>seep</u> |
| iii | <u>through</u> <u>the</u> <u>trees</u> |
| iv | Aut <u>umn</u> has <u>come</u> |
| v | with trouble and care |

Its simplicity evokes a similarly simple response. Each group is given a pair of corresponding musical ideas (usually, but not always, a pair of intervals) whose intervallic profile falls then rises on each occasion. This creates a repeated small-scale antecedent/consequent effect which cuts across the larger ABA design. This is enhanced, in every group, by the presence of the interval of a whole tone. The choice of other intervals also goes against the rhythmic patterning in that the largest (and characterising) interval of each group gets progressively larger:

maj 3 : per 4 : dim 5 : m1 6 : m1 7

This intervallic expansion is supported by the way in which the pitches of the line are exposed (see Ex. 8-7): the 'polar' Bbs appear to be approached from the centre of symmetry, i.e. the absent E. Ex. 8-7 is not intended to show that any specifically tonal voice-leading is at work in the vocal line; indeed, hierarchies exist only in relation to the two emerging chromatic lines. However, it does illustrate the composite nature of the vocal part and the quite literal centring in space of the music around the E. The line comes to an end almost as soon as the octave duplication has occurred. It is in this sense that it could be seen to be directed: a linear rather than a circular construct. (It is also interesting to note that Birtwistle chooses to

Ex. 8-7

Birtwistle, Four Songs of Autumn, Song 3, Soprano

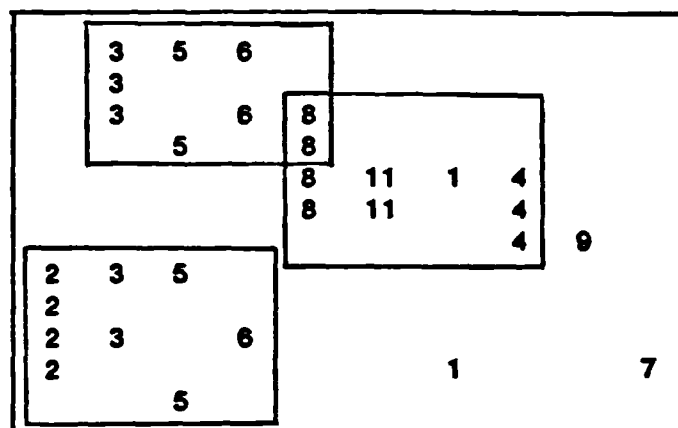


begin the line, not with the two pitches symmetrically placed about the central E, which he could well have done, but with its lower semitone neighbour and upper wholetone neighbour, thus again pointing to [0,1,3] as an important surface motivic element.)

As far as the harmony of this song is concerned, the homorhythmic nature of the accompanying instruments immediately suggests some kind of vertical chord analysis. If we look at the trichords formed by violin 1, viola and cello in terms of pc sets, a pattern emerges as shown in Fig. 8-2 (Integers refer to the ordinal number of sets in Forte's list of prime forms whose cardinality is always 3. Reading horizontally through Fig. 8-2 gives the order of the sets in the music).

Fig. 8-2: Trichordal Sets In Violin 1, Viola and Cello

[figures = ordinal in Forteian classification of 3-note sets]



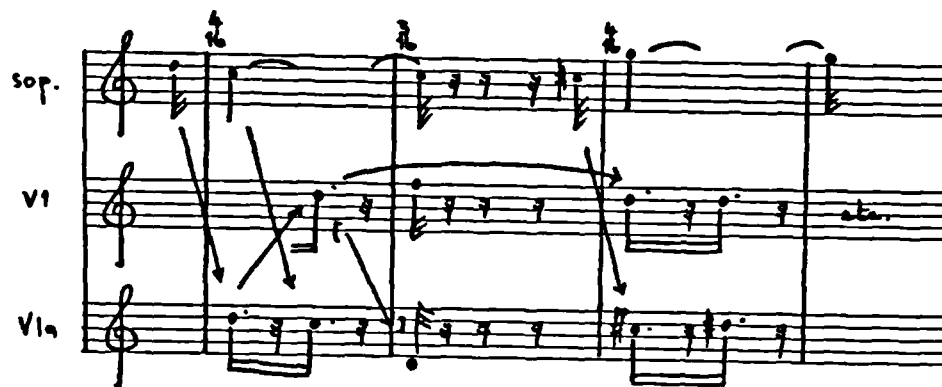
A degree of harmonic consistency is apparent in that the song moves from one harmonic region (using sets 3-3, 3-5 and 3-6 plus 3-8) to another (using principally sets 3-8, 3-11 and 3-4) and back (with 3-2 now replacing 3-8). Again an approximate ABA design emerges. If, however, the violin 2 E is also included in this examination to create pc sets

with 4 members, the picture becomes much less clear. In other words, though the various strata of the song are related in certain formal ways, they still function independently in other respects; indeed, the very invariance of pitch and rhythm in the violin 2 line demands that it be heard as a separate entity.

It appears impossible, then, to say little more about the harmony of the song other than in terms of vague harmonic regions. There is certainly not the same intervallic regularity in the accompanying voices as was found in the vocal line: the whole-tone, for instance, is not transferred in any thoroughgoing way. Birtwistle appears to be exploiting the total chromatic fairly freely. However, towards the centre of the song another feature begins to emerge, namely an insistence on the note D (an octave and a tone above middle C). It is first heard in the viola in b. 37 followed immediately by the soprano before being reiterated in violin 1 (b. 40) and viola (b. 42). Other pitches from the vocal line are also picked out by the viola (see Ex. 8-8): it is as if the viola, assisted by violin 1, is weaving some kind of informal 'trope' around the soprano line. These moments of comparative harmonic clarity coincide with the B sections of the various other arch shapes at work in the song as already outlined: just as the durations contract and expand again, so the harmony not only moves from one region to another and back but also shifts from an area of relative harmonic obscurity to one that is more focussed and back. Furthermore, the fact that D is highlighted in this way is significant with regard to the recurring cadential idea where, as already seen, D elaborates the omnipresent E: the momentary coming together here of solo and accompaniment around D in the context of the invariant E is a related

Ex. 3-3

Birtwistle, Four Songs of Autumn, Song 3



Ex. 3-9

Birtwistle, Four Songs of Autumn, Song 1



harmonic gesture.

By comparison, the harmony of the first song is easier to identify. The static (i.e. non-rhythmicised) nature of the cello pedal is reflected in the other voices of the quartet. Each line oscillates within a two- or three-note segment of the chromatic scale. Also these segments appear to be chosen in such a way as to give priority to a harmony built of fourths and fifths (see Ex. 8-9a). A chord is thus erected above the cello E which does not move as such but whose members are inflected by chromatic adjacencies – a kind of 'fuzzy' diatonicism. Although the solo soprano line is rhythmically and gesturally separated from the quartet, it is possible to read this line too as being based around a chromatically inflected perfect fifth: in this instance, the fifth D-A (see Ex. 8-9b). The registral separation of the high A, with its G# lower neighbour note, and the tendency of this A always to fall to the D or its C# lower neighbour, would seem to support such a reading. Again, it should be stressed that Ex. 8-9b is intended to illustrate localised voice-leading and pitch hierarchies only and not any larger-scale directed motion.

How, then, are we to bring together all the seemingly contradictory elements of this analysis? Would such an enterprise be pertinent here in any case? Traditional theories preoccupied with synthesis would appear to be useless in a context where mutually exclusive ideas occupy the same musical space. In the third song, as we have seen, there are a number of different layers which proceed independently: the constant E in violin 2; the separate rhythmic schemes of soprano, violin 2 and trio; the antecedent/consequent melodic profile of the vocal line; the soprano's motion out from an E centre; the words,

their sounds and their meanings. And in the work as a whole the independence of each song is contradicted by the registral and rhythmic progress of the E across them. The linear and the cyclic coexist. Yet, despite this paradox, the music is not incoherent. Birtwistle himself has likened this situation to ideas he sees in the world around him. In relation to The Triumph of Time he spoke of a foreground procession ('a (necessarily) linked chain of material objects which have no necessary connection with each other') in the context of background, recurrent procedures. [3] In Earth Dances he talked of shifting strata. In the Four Songs, too, the many strands are held in some kind of meaningful balance and it is the tensions thus generated that give his music its energy. To try to resolve the paradox would be to deny the music its power.

To make sense of this paradox, it is imperative that the analyst takes account of the framework within which the many layers of the music are held, the relationships between layers, not the function of any one line individually. The external proportions of the work are important in defining the music's limits - hence the significance of prelude, postlude and refrain (cadence) in punctuating the progress of the music in time. In certain respects, these songs are little different from Punch and Judy, for instance, a work more than twenty years their junior, where the various internal workings of the music are controlled within a clear external musico-dramatic frame. Symmetries, too, provide the musical layers of the work with a logic and coherence. They can operate on every level of structure, governing both large- and small-scale pitch dispositions as well as rhythmic patterning, without in any way synthesising these different elements.

Of course, common features can be found amongst the layers which provide further coherence without detracting from the independence of each stratum: the approximate coordination of the arch shapes in song 3, for example, the momentary convergence on D in the middle of this song, or the role throughout of motivic ideas like the [0,1,3] cell. But it is the pitch-class E in its various guises which, as we have seen, is the work's raison d'être, offering a new response to an old obsession. It acts as a centre of focus – at times, a literal centre, on other occasions, an axis around which the music moves.

NOTES

- 1 Programme note for the first performance of the work, a London Sinfonietta Commission, given on Sunday 24 January 1988 at the Royal Festival Hall. The texts of the Four Songs are taken from Bunya Yasuhide The Grasses and the Trees and anonymous poems from Kokinshu (translated into English by Geoffrey Bownas and Anthony Thwaite)
- 2 To make this symmetry 'work', one has to read the next highest pitch, the G, as the upper limit – for which a case can be made if one counts the large gap between the uppermost notes as some kind of 'exclusion zone'
- 3 Quoted in Michael Hall, Harrison Birtwistle, p. 175

B N G

CHAPTER 9

Conclusion

By implication, a conclusion is something which serves the function both of closure and of synthesis and, as such, would seem to be in marked contrast to the substance of this thesis. Central to my argument has been a definition of modernism as an aesthetic concept which embraces, at a fundamental level, a notion of contradiction, or of various kinds of contradictions, which cannot simply be 'resolved'. Where traditional analytical methodologies have essentially been concerned with the explication of the structure of a musical work (derived from a nineteenth-century understanding of aesthetic value) in terms of wholeness, synthesis and connectedness, I have argued that, in the context of developments in twentieth-century art, a new analytical awareness is necessary which acknowledges the validity of opposition as a central and positive constructive principle that challenges but that does not necessarily undermine our understanding of what makes a musical utterance coherent. Thus, a closed and unitary reading of a modern or modernist work of art is neither truly possible nor appropriate. Of necessity, any reading must be provisional and, therefore, inconclusive - that is to say, it should leave open the likely meanings of a work's structure which might, in any case, point in more than one direction at once.

The music of Birtwistle, which has formed the focus of this study, belongs within a clearly-defined tradition of modernist musical thought stemming from Debussy, Stravinsky, Varèse, Webern and even Satie. What

connects the work of all these composers – and, indeed, of other modernists, particularly those in the visual arts such as Klee and Kandinsky, who have influenced Birtwistle's thinking so strongly – is not some fundamental, unifying principle such as tonality or perspective, but a common aesthetic outlook, a shared world of ideas. Modern art need not be about a single idea; indeed, as we have seen, it is the 'urge to fragmentation' which has characterised so much modern thought. Musical structure itself has been fragmented, broken up. But the history of modernism has not only been about the destruction of an old, outmoded order; it has also been about the quest for new orders independent of old systems, the quest for new kinds of coherence rather than a single and all-embracing unity. Birtwistle's music is fascinating in this regard as it has developed the concerns of the early modernists and emerged to speak with a highly original voice. The essence of Birtwistle's modernism can be expressed in a notion of opposition – not a simple, single kind of opposition but one which, nevertheless, underpins all his work. Yet these oppositions never result in incoherence; they are balanced in such a way as to give the music meaning without synthesising or dissolving the strength of the contradictions. The challenge of Birtwistle's music is the difficult questions of analysis and interpretation it raises. The music is coherent, i.e. it self-evidently makes sense. The analytical problem lies in the attempt to articulate the nature of that coherence without the need to rely on inappropriate theories of unity or organicism.

I have suggested some of the ways in which such an analytical investigation might proceed. In particular, I have drawn on the work of earlier twentieth-century modernists whose approaches to the balancing

of oppositions and contradictions provide useful models for this inquiry. In all these cases – whether in relation to the music of Stravinsky [1] or Varèse or the pedagogical ideas of Klee – the aesthetics of modernism provide a potential framework for the containment of fragmentary ideas. Because of the starkness of the contradictions they embody, the neo-classical music of Stravinsky has proved to offer a particularly fruitful testing-ground for the problems of analytical interpretation encountered in Birtwistle.

Much twentieth-century music would appear to fulfil Lerdahl's fear of its being coherent 'in the face of no theory'. [2] The problem lies with the theory rather than with the music; the interest lies in attempting to define the music's coherence. In the case of Birtwistle's unique development of the ideas of modernism, it is a matter of finding ways of balancing the regular and the irregular, the linear and the circular, the analysable and the unanalysable. Though Birtwistle's music may lack 'system' ('theory'), as indicated by the composer's comments which head Chapter 1, there is nevertheless, an identifiable method of working, a contained set of possibilities ('coherence'). The answers to the structural questions raised by this music cannot lie exclusively in the search for some all-encompassing Schenkerian background, Schoenbergian Grundgestalt or Fortean nexus. A more broadly-based and flexible analytical outlook is required which both acknowledges and accounts for the dynamic and meaningful opposition of the constituent strata of any modern musical work.

NOTES

- 1 Stravinsky's rejection of the label notwithstanding! – 'I am no more academic than I am modern, no more modern than I am conservative'. Poetics of Music in the Form of Six Lessons, tr. Arthur Knodel and Ingolf Dahl (Cambridge, Mass.: Harvard University Press, 1975), p. 85
- 2 Fred Lerdahl, 'Atonal Prolongational Structure', Contemporary Music Review, Vol. 4, 1989, p. 65

BL PA

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A P P E N D I X

Score of Birtwistle 'Four Songs of Autumn'

-

Four Songs of Autumn.

William R. R. R.

The grasses and trees change their colours, but the song of the birds is still the same. The grasses and trees change their colours, but the song of the birds is still the same.

Handwritten musical score for a song. The lyrics are: "The grasses and trees change their colours, but the song of the birds is still the same." The score includes a vocal line and a piano accompaniment. The piano part features a repeating rhythmic pattern in the right hand and a more complex, flowing line in the left hand. The lyrics are written below the vocal line.

Handwritten musical score for a song. The lyrics are: "The grasses and trees change their colours, but the song of the birds is still the same." The score includes a vocal line and a piano accompaniment. The piano part features a repeating rhythmic pattern in the right hand and a more complex, flowing line in the left hand. The lyrics are written below the vocal line.

Handwritten musical score for a piece titled "The morning light starts to creep through the leaves, As - tum has - come with bow ble, and crec." The score is written on a grand staff (treble and bass clefs) with a key signature of one flat (B-flat). The tempo is marked "Tempo 1/4 = 57". The score is divided into measures, with measure numbers 1 through 10 written below the staff. The lyrics are written below the staff, corresponding to the notes. The score includes various musical notations such as notes, rests, and dynamic markings (e.g., *pp*, *f*, *acc.*). The piece concludes with a final measure marked "fin".

In the spirit-ly haze
 foot Dim, dis as pea-
 ring, The wild geese are ca-
 ming
 All
 wind with
 bare
 as
 form
 knits

Handwritten musical score for "The Rose Tree" in G major, Op. 10, No. 15. The score is written on ten staves, with the first five staves for the vocal part and the last five for the piano accompaniment. The music is in 2/4 time and features a simple melody with a key signature of one sharp (F#). The lyrics are written below the vocal staff.

B I B L I O G R A P H Y

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